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C O S M E T I C S • S O A P S • F L A V O R S

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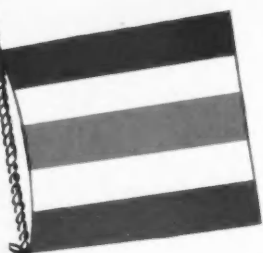
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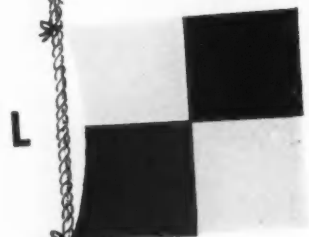
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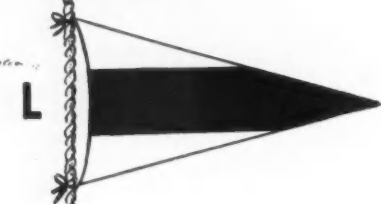
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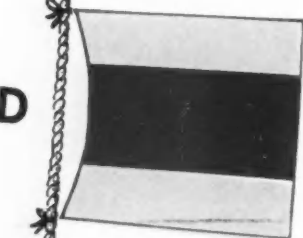
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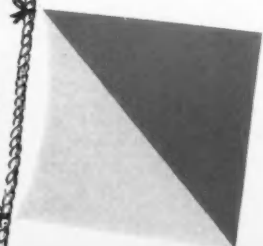


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Flags to get help during times like these.

. . . just call D & O. Our facilities and
experience of over 144 years have made
us a lot of staunch friends. May we serve
you too?

- AROMATIC RAW MATERIALS
- ESSENTIAL OILS
- PERFUME COMPOUNDS

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desiderata

Comment on interesting new chemical developments and their application to cosmetics and toiletries.

by MAISON G. DENAVARRE

COSMETIC STOCKINGS

This is the time to do your experimental work on cosmetic stockings because there will be a big demand for them next year. Women can't seem to get all the nylon stockings they need, and rayon or cotton stockings just don't last. Ask any girl. So, as soon as the weather permits, watch for a mass acceptance of cosmetic stockings. It has to come! Are you prepared? The product must go on easily, apply smoothly without streaking, be water insoluble but wash off readily with soap and water and not rub off onto the clothes.

DEHYDRATED FOODS

There are lessons to be learned from the food dehydration industry. Try to recall how a food is "concentrated" by evaporation of its water content so that it occupies only a part of the space of the original. True, few dehydrated foods taste anything like the non-dehydrated product. A grape and a raisin or a plum and a prune are good examples. Yet . . . raisins and prunes are sold in tremendous tonnage. Are there any items in your line that have a large excess of water?

TALC REPLACEMENT

Obtaining a good white and high grade talc is going to be tougher than heck. A new material with which I am working in the laboratory has many possibilities in replacing inferior talc, making it superior in performance. This new material is pure white in color, has nice slip, is inert and neutral. The moment the experimental



work is completed, the supplier will be able to take care of almost any size demand for it that may be manifested. It is made from purely non-critical materials—and it will be cheap. Particle size is uniform and extremely small.

BEESWAX

One of the main suppliers of beeswax advises me that there is no shortage of the material; that, while crude deliveries are uncertain because of shipping difficulties, everyone of its customers is being taken care of. THAT is good news and indicates that the company has a well-planned program, one that other companies supplying this industry with materials might follow. Congratulations for your enterprise.

NEW VANILLA FLAVOR

Flavor manufacturers capable of making tablets can save themselves a lot of solvent by making the new vanilla flavoring that the Army has devised. It is the size of a five-grain aspirin tablet, one of which has the flavoring content of a teaspoonful of vanilla extract. This tablet is composed of milk sugar, starch and vanillin. A tablet with more value could be better made from dextrose, starch and vanillin. Anyway, the idea can be carried on

further for use by the civilian population. And it need not be limited to vanilla. Suitably coated, the tablet could contain a variety of flavoring materials.

WAR ORDERS

The toilet goods industry is not on its toes. It is not getting the share of war orders that it should. I have seen a couple orders that some toilet goods house should have had but someone else got it. First, register the kind of facilities you have with your WPB. Then, go after every order that you can possibly fill. The usual cosmetic houses can make ointments, powders and pastes with no difficulty . . . but not enough of them are doing it. As time goes on, more and bigger war orders will have to be filled. Do YOUR bit. You also can do a lot of subcontract work. Get around and mix with the men in other industries and find out what you can do for them. You know what Mahomet did when the mountain did not come to him.

REPLACEMENTS

If you already do not have a copy of the Replacements bulletin, better get your copy right soon. You will be making replacements fast and often within the not too distant future. The bulletin lists many replacements for products getting scarce. It also suggests alternate formulations. Get your copy by writing THE AMERICAN PERFUMER at once. They won't last forever.

MUCILAGES

Algin, a synonym for sodium alginate, is being produced now by a number of companies and it is becoming considerably easier to obtain. For a while, the material was quite short. Another ingredient promising to come back in a large way is Irish moss mucilage. It has good emulsifying properties and is an excellent base for hand lotions. Thus, tragacanth and quince seed can be dispensed with if necessary. There also is methyl cellulose. It, too, has some interesting properties in emulsions and in various mucilage type products. Any of these three materials



The eyes of all America are upon the United States Treasury Roll of Honor appearing in the "Payroll Savings News." For copy write War Savings Staff, Treasury Department, Washington, D. C.

HOW TO "TOP THAT 10% BY NEW YEAR'S"

Out of the 13 labor-management conferences sponsored by the National Committee for Payroll Savings and conducted by the Treasury Department throughout the Nation has come this formula for reaching the 10% of gross payroll War Bond objective:

1. **Decide to get 10%.**
It has been the Treasury experience wherever management and labor have gotten together and decided the job could be done, the job was done.
2. **Get a committee of labor and management to work out details for solicitation.**
 - a. They, in turn, will appoint captain-leaders or chairmen who will be responsible for actual solicitation of no more than 10 workers.
 - b. A card should be prepared for each and every worker with his name on it.
 - c. An estimate should be made of the possible amount each worker can set aside so that an "over-all" of 10% is achieved. Some may not be able to set aside 10%, others can save more.
3. **Set aside a date to start the drive.**
4. **There should be little or no time between the announcement of the drive and the drive itself.**
The drive should last not over 1 week.
5. The opening of the drive may be through a talk, a rally, or just a plain announcement in each department.
6. Schedule competition between departments; show progress charts daily.
7. Set as a goal the Treasury flag with a "T."

AS of today, more than 20,000 firms of all sizes have reached the "Honor Roll" goal of at least 10% of the gross payroll in War Bonds. This is a glorious testimony to the voluntary American way of facing emergencies.

But there is still more to be done. By January 1st, 1943, the Treasury hopes to raise participation from the present total of around 20,000,000 employees investing an average of 8% of earnings to over 30,000,000 investing an average of at least 10% of earnings in War Bonds.

You are urged to set your own sights accordingly and to do all in your power to start the new year on the Roll of Honor, to give War Bonds for bonuses, and to purchase up to the limit, both personally and as a company, of Series F and G Bonds. (Remember that the new limitation of purchases of F and G Bonds in any one calendar year has been increased from \$50,000 to \$100,000.)

TIME IS SHORT. Our country is counting on you to—

"TOP THAT 10% BY NEW YEAR'S"

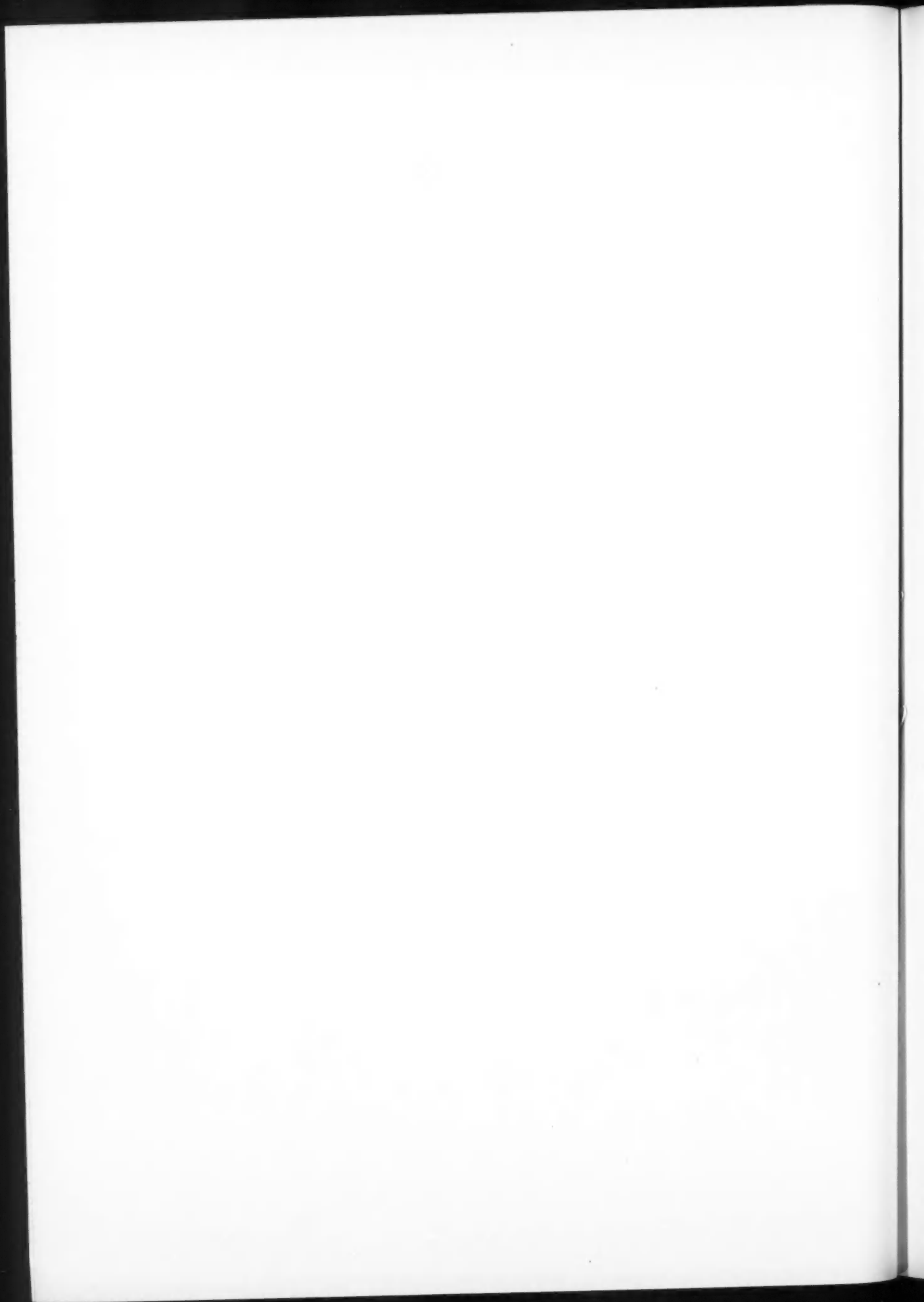


Save with War Savings Bonds

This space is a Contribution to America's All-Out War Effort by The American Perfumer and Essential Oil Review



Season's greetings
ALBERT VERLEY & CO.
M. Brunell Giftrobb



can be used to extend glycerin in creams containing it, such as hand creams, lotions, shaving creams and toothpastes.

GLYCERIN REPLACEMENTS

The glycerin replacements being sold under different trade names should be further qualified to enable a technician to know if the material can be used in a particular application. Thus in products containing aluminum magnesium or calcium lactates cannot be used or they will form insoluble salts which have no humectant properties. Certain products are mixtures of invert sugar and propylene glycol. Such a product cannot be used in a straight alcoholic solution. Furthermore, adequate preservation must be afforded or fermentation may result. Propylene glycol and the ethyl ether of diethylene glycol have their limitations, too. The latter product is not being looked upon with favor by the F.D.A. even though the sole supplier claims to have proof of safety.

NEW PRESERVATIVE

The preservation of manufactured products is a universal problem. Every time a new or unusual preservative makes its appearance, it is the purpose of this column to direct your attention to it. This time it is a mixture of the methyl and ethyl parahydroxybenzoates, solubilized to be used in any kind of media. It takes from 1:750 to 1:1000 to preserve most products. Occasionally it may require more. The material dissolves easily and is especially useful for mucilages, emulsions and products containing a large proportion of water.

Bermuda perfume industry

Gloomy reports from Bermuda indicate the rapid decline of a promising perfume industry. During the past four months the factory of a leading manufacturer of perfume has been completely closed down.

One of the factors contributing to this situation was the lack of necessary fixed oils used in the enfleurage process. Another factor was the inability of the manufacturer to obtain the necessary solvent, or alcohol.

As of possible interest to United States importers: the Bermuda manufacturers are reported to be holding certain quantities of essential oils and basic materials, such as civet, Easter lily, jasmine, and jonquil extracts. Bulk-finished perfumes of Easter lily, oleander, jasmine, gardenia, and passion-flower are said to lack only bottle caps and packaging materials to put them into a salable form.

QUESTIONS & ANSWERS

418. DISTRIBUTING PERFUMES

Q: I am considering the possibility of selling perfumes in a small way, making them from compounds. What permits would I have to have? Subscriber, Los Angeles, Cal.

A: You can obtain compounds for perfumes from any of the advertisers of THE AMERICAN PERFUMER. You will have to apply for an alcohol permit, to the Alcohol Tax Unit of the Bureau of Internal Revenue, U. S. Treasury Dept. You will have to post a bond commensurate with the amount of alcohol you will use. Since all users of alcohol have been cut to 70 per cent for 1942, it is a guess as to how you will fare in getting an alcohol permit. (The cut is now to 50 per cent.)

419. HAIR OINTMENT AIDS

Q: I would appreciate it very much if you would give me the name of a preservative to keep my hair ointment together. It contains balsam Peru and liquor carbonis detergens. I would also like a formula for hair bleach to make hair blonde with the peroxide in a separate bottle. I. L., N. J.

A: Castor oil will dissolve your balsam Peru and if this mixture is added to lanolin, the whole mass will stay uniform. If sufficient liquor carbonis detergens and balsam Peru are present, you need no preservative. Chances are your balsam Peru is separating out because of insolubility. There is nothing in this mixture that will spoil. As regards a hair bleach, with a separate bottle of peroxide, you, of course, know that peroxide is the bleaching agent. What you have in mind for the other container, we do not know. If you care to give us further information, we will try to help you.

420. GREASE PROOFING BOXES

Q: Please put us in touch with a source of supply of materials for grease-proofing the interior of paper boxes. R. M. Ill.

A: This question is somewhat out of our line but we do know

that parchment further coated with water-soluble resins of the borophosphate type or a methyl cellulose mucilage is applied to the interior of containers intended to hold grease. The coating must be uniform. Under separate cover, we are sending you the names of suppliers of these materials.

421. PERFUME SOLUBILIZERS

Q: Would you be kind enough to advise us of the name of the manufacturer who makes a perfume solubilizer for use in conjunction with volatile oils, flavors and perfumes that will render them water soluble? S. J., Miss.

A: There are a number of products which can be used for this purpose but each has its limitations. Some will work with one mixture of flavors or perfumes but not with another. Certain wetting agents, sulfonated oils and soap solutions have been used. Both triethanolamine and ammonia soaps have good solvent action. We are sending you under separate cover the names of manufacturers of solubilizers of this type.

422. CETYL ALCOHOL

Q: We have been using cetyl alcohol in a hand cream preparation for quite some time and now find ourselves in a position where this can no longer be purchased. We are wondering if you could supply us with a satisfactory substitute. H. L., Ohio.

A: Practically speaking, the only other substitute for cetyl alcohol is stearyl alcohol. However, this material is just as difficult to obtain as cetyl alcohol. You probably will have to do without this for the duration of the war and try to change your formula in some way so that you can get a characteristic nice feel. This sometimes can be done by replacing part of the stearic acid with one of the poly-hydroxy stearates or by the addition of a mucilage to the product. Try these and if they do not seem to help, please give us more information about your formula and we may be able to help you.

RUGGED IN SERVICE



Leader of Alaskan Dog Team. Photo courtesy of Yosemite Park and Curry Company.

Sheffalloy
TRADE MARK REGISTERED
TUBES
SHEFFIELD PROCESS

LEADER of his team, this hardy Alaskan dog keeps on going under the most trying conditions, directing and inspiring his followers. He's a lot like Sheffalloy Sheffield Process Tubes . . . pliable as an old glove, yet tough and rugged in service . . . built to withstand all the hard-handed abuse users can give them. Sheffalloy Tubes use only the less critical alloys. Prepared according to our exclusive Sheffield Process, they rival pre-war New England Tubes, widely known for their durable toughness.

"Sheffalloy" Tubes and "Vinicote" Interior Coatings now make possible the use of collapsible tubes for packaging many products heretofore denied the advantages of these convenient, well-liked containers. Ask us about them, today.

NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 SO. CANAL STREET CHICAGO • NEW LONDON, CONN. • W. K. SHEFFIELD, 500 FIFTH AVENUE, NEW YORK
THE WILCO COMPANY, 6800 MCKINLEY AVE., LOS ANGELES, CAL. • EXPORT DIVISION: 116 NASSAU ST., NEW YORK

COMMENT

Danger to health from tooth paste in lead tubes negligible

One who eats an apple carrying the maximum amount of lead permitted by tolerance specifications ingests 100 times more lead than the person who brushes his teeth twice daily with tooth paste taken from a lead tube with a 7½ per cent tin content as shown by research of the Technical Committee of the Packaging Institute. So far research on tubes with a 5 per cent tin content indicates that the amount of lead absorption from tooth paste packed in them will not be much higher. It is thus fairly evident that the danger of lead poisoning from using tooth paste packed in lead tubes containing the allowable amount of tin is practically negligible. As an added precaution the tube may be waxed internally. This practice is generally followed.

For packing tooth paste there is no satisfactory substitute for the metal collapsible tube. It affords a convenient, sanitary, hermetically sealed, unbreakable and individual container that keeps the contents fresh and moist and usable until the tube is completely exhausted. Accordingly in view of the adequate supply of lead and the increasing amounts of tin which are being recovered from old tubes by the Tin Salvage Institute, the results of the research work of the Packaging Institute and the Food and Drug Administration are reassuring to tooth paste manufacturers who feel that the metal collapsible tube has contributed largely to the widespread popularity of tooth paste.

Latent headaches probable in new Controlled Materials Plan

The new Controlled Materials Plan which will supersede the present Production Requirements Plan and the priorities system by next July 1 is designed to bring about a better adjustment of production programs to materials supply. The transition from methods now in effect is to be accomplished by gradually substituting the new plan for the present controls in an orderly manner and without disruption of production. The next six months will be largely an ironing-out period.

Under the present Production Re-



quirements Plan each concern submits its own requirements to the War Production Board for approval and receives from it an individual authorization to obtain needed materials. This method and the priorities system will be discarded. Under the Controlled Materials Plan, the allotment of materials will be made for civilian use through the Office of Civilian Supply; and for direct war purposes through six other agencies such as the War and Navy departments, Lend-Lease, Maritime Commission, Aircraft Scheduling Unit and Board of Economic Welfare. In the allied industries the old plan worked fairly well. Whether concerns not engaged directly in war work will fare equally well under the new plan is by no means certain. There is always the possibility that the single unit through which civilian industry must get its supplies may not get all that is justly due to the manufacturers whose interests are more or less its responsibility.

Covering such a vast field the practical working out of the new plan is not without its complications. Even with detailed regulations and instructions to be issued later plenty of headaches are likely to be encountered in carrying out the provisions of the plan. But as it was evolved out of experience it should provide a more efficient flow of materials to war industries, which, in its final analysis, is its whole purpose.

End-use symbols eliminated under new WPB streamlining policy

Priorities Regulation No. 10 which set up the allocation classification system requiring that all purchase orders bear designated end-use symbols has been revoked by the War Production Board. The plan, which was created to check the distribution of materials under control, involved an immense amount of detailed paper work and experience demonstrated that the same results may be obtained by a simpler method without imposing an equal burden on manufacturers. Since its reorganization the War Production Board appears to have inaugurated a streamlining policy, eliminating needless restrictions, such as those in L-171 and procedures such as the requirement for the use of end symbols, which, while designed to produce results did so in a more roundabout way than was necessary.

Men who move too far and too fast lose better things of life

Never is the interdependence of human beings so manifest as in their common struggle for survival, points out F. E. Mullen, general manager of the National Broadcasting Co. It is only when man moves too far and too fast that he loses touch with his fellow humans. Eventually he finds that his isolation from them is an empty gain. He may have all the power and the wealth in the world, but if he uses the power only to gain more, without sharing, without cooperation; and the wealth only to protect what he has or to gain more, he is soon a man alone. Where once he was indifferent to others because his power and money could buy him everything including companionship, he soon finds it can buy him nothing real, nothing lasting and he ends his days in bitterness and loneliness, without friends and without remembrance.

Dealers' profit found in last third of sales

The dealer's profits are wrapped up in the last one-third of the line. All of his previous sales have gone to pay back the original purchase price, store expense and overhead. On the last one-third is where he makes his money.

Wardia



Fresh and exhilarating as the flower itself—WARDIA—
an entirely synthetic Rose character, is meeting the most exacting demands
of discriminating perfumers. Used by itself or as a replacement for the
natural Rose oil it is invaluable. A Chuit, Naef product, ample stocks
are available in this country—\$58.00 per pound—a trial ounce \$3.75.

Firmenich & Co.
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CHICAGO OFFICE . . . 612 NORTH MICHIGAN AVENUE

RE-USE PERFUME CONTAINERS IN HAWAII

*Waning popularity of native perfumes revived
and greatly stimulated by native hand carved
wood containers . . . How they are made*

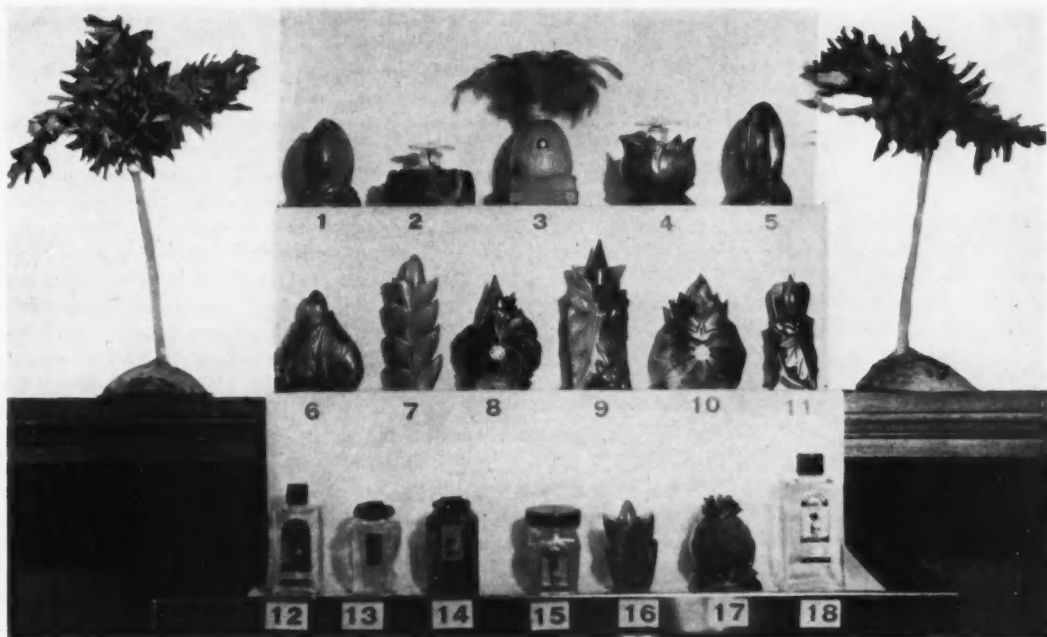
by JOHN T. DAVIS

HAWAIIAN perfume merchandising within recent years has become flower-lined into a fine art. Beautifully designed wood carvings, inspired by the tropical flowers and vegetation such as the giant fern, the taro leaf, the hibiscus or the mountain ginger, are the latest innovation in perfume containers. Of the thirty or more of these various containers already commercialized, every one is less than six inches in height and small enough to be carried in a hand bag.

Although primarily designed for the dressing table, these containers are first rate decorative

pieces which enhance the beauty of any room. Each container, regardless of the variation of its pattern, has a small bud-like knob at the top. Inside is a small glass vial containing from 2 drams to an ounce of the popular Hawaiian perfume, commercially named "Pikaki Lani" (Heavenly Flower of Hawaii). This perfume has become an important product of Hawaii and is proving quite popular in those parts of the United States where it has been introduced.

The idea for the production of the perfume was conceived from an old Hawaiian custom . . . the



Carved wood containers, whose designs are inspired by tropical vegetation especially flowers, spur sales of Hawaiian perfumes 1, Coconut. 2, Taro Bowl. 3, Uli Uli, an imitation of Hawaiian gourd. 4, Water Lily Bowl. 5, Starfruit. 6, Twin Taro. 7, Haleconia. 8, Hibiscus. 9, Large Api. 10, Lily Leaf. 11, Small Api. 12, Pikake Brilliantine. 13, Refill. 14, Hawaiian Caress. 15, Pikake Pomade. 16, Haleconia Bud. 17, Pineapple. 18, Pikake Cologne. Nos. 12 and 15 are hair dressings



Native Flower, Large Api



Novel Butterfly Motif



Water Lily Pedestal



Typical Native Bird

Photos—The Harders Co., Ltd., Honolulu

custom of the giving of a lei as a special mark of honor to friends, a tradition originating from the ancient manner of conferring honor upon the Hawaiian gods. This custom is still observed. As the most popular leis are made of fresh ginger, carnation, gardenia and pikaki blossoms, these Hawaiian perfumes were made to closely resemble their fragrances.

HOW FOREIGN COMPETITION WAS OVERCOME

While the perfume itself proved quite popular when introduced, it took several years before its sale reached a sizeable volume. One reason for this was due to the competition from the imported, expensive-looking perfumes which were sold in fancy containers as compared to the small inartistic test-tube shaped vials used as containers by the Hawaiian perfumers. Once the novelty of this new perfume had worn thin, there was a good chance that the Hawaiian perfume industry would die a slow natural death. Something had to be done to increase its sale.

HOW POPULARITY WAS REVIVED

In a campaign to revive the popularity of the Hawaiian perfume the manufacturers again went back to the old time Hawaiians for an idea. The Hawaiians had always been artisans of the first order. Even during Captain Cook's first visit to the Islands, he found the natives adept at the arts of weaving feather cloaks and carving intricate images of their gods and idols from hardwood. The perfume manufacturers decided to utilize one phase of the old Hawaiian art, the art of carving. To make the perfume more typically Hawaiian, why not sell it in hardwood containers made from the same wood for which Hawaii has always been famous?

Hans H. Harders, kamaaina (oldtimer) resident of the Islands, was one of the first men to see the commercial possibility of utilizing this idea in merchandising perfume. He immediately organized a group of artists and expert wood carvers and went about commercializing the product. Since all the perfumes were simulations of the scents of Hawaiian flowers, it was most natural that the containers should also carry the flower motif.

During the early stages of experimentation, a dozen different kinds of hardwood were tried. Most of them were gradually eliminated for one reason or another. After months of exhaustive study the hardwood most well suited for this kind of work was found to be what is now commercially known as "Milo," a beautifully grained wood which grows on the volcanic slopes of Hawaii's picturesque mountains. This wood was found to take varnish well and can be highly polished. Today the "Milo" is used almost exclusively in the manufacture of these perfume containers. In some cases, however, the monkey pod has been used with fairly good results.

HOW THE CONTAINERS ARE DESIGNED AND MADE

In the manufacture of these perfume containers the work of designing them constitutes the most difficult phase of the work. A drawing from an original flower or a leaf is first made by an artist.

Once the drawing is completed, it is handed to the carver who makes an exact replica of the same in wood. He carefully takes notes of the time required for the work and makes suggestions for possible improvements. Many designs are discarded as soon as the first models are made because they are found to lack artistic distinction or found too complicated to be produced on a commercial scale. Seldom if ever does the first model turn out anywhere near the preconceived plans of the artist. Those designs which show promise are worked over and likely as not, many more models are made before any one is finally adopted. The design for a single container is usually the result of months of work. Even after a design has been finally approved and accepted, it cannot be manufactured rapidly or on a large scale because the work involved is done mostly by hand and only by experts. Every perfume container on the market today is hand carved except for general cuts which are made by machine saws.

RE-USE VALUE OF CONTAINERS

The strongest sales appeal of these perfume containers is that they can be used over and over for occasional perfume refills and otherwise.

WHAT LIES AHEAD FOR COSMETIC MAKERS?

Limitations imposed in Australia, Canada and England indicate what may be expected here . . . Spirit of cooperation needed . . . The outlook after the war

by NORTHAM WARREN

*President, Northam Warren Corp., Stamford, Conn.**



OUR COSMETIC industry is much more fortunate than that of Great Britain, Canada and the other allied nations in that it has the benefit of their experience, their mistakes and their present plan of restrictions, instead of having to fall back on the method of trial and error.

HOW AUSTRALIA LIMITS COSMETICS

Australia, for instance, directly on the Japanese front, has restricted the manufacture of cosmetics as follows: No more manufacture of beauty masks, suntan preparations, or leg makeup. No creams other than finishing or cold cream. No more hair lacquers, nail lacquers, cuticle preparations, bath salts, perfumes or toilet waters. No more after-shaving preparations, bay rum, eye cosmetics and brilliantine, and no perfumed toilet preparations of any kind for men.

CANADIAN RESTRICTIONS TIGHTENING

In Canada the restrictions are only a little less severe and tightening all the time: Six shades of nail polish, four of rouge and lipsticks, four odors of perfumes, colognes, talc and other toilet preparations. No increase in the number of shades or odors. No change of trade mark or trade name or odor or size. No new product and no samples. Significant, also, is the prohibition that hits a tiny fringe of the industry, viz., no more shipments on consignment. All this, of course, in addition to the drastic regulations governing employment which provide that no person capable of working can be idle for longer than two weeks; that no employer may dismiss a worker and no worker leave his job without seven days' notice; and that no person may seek employment and no employer may hire him without a permit.

U. S. RESTRICTIONS ARE MILD

Compared with these drastic limitations, our restrictions seem generous in the extreme, but there is every prospect that they will be tightened drastically in order to accomplish the job of conserving raw materials, labor and transportation. Our in-

dustry is lucky in having as chairman of the Cosmetic Section, Mr. C. A. Willard, who has shown a fairness, firmness and intelligence that has stamped him as outstanding in the War Production Board. Furthermore, he has surrounded himself with a capable, efficient staff of hard working experts in their respective lines, which insures fair and intelligent handling of industry problems.

WHAT MAY BE EXPECTED

Anyone who believes that there will be cosmetics as usual during the war needs to look at countries which have been fighting for three years. There you will find a scarcity not only of cosmetics but of every luxury of modern life which will indicate the sacrifices and privations that we shall encounter in the months to come. No country that has tried these limitations has stopped with its initial effort, but on the contrary has steadily tightened the restrictions under the stern necessity of war.

For instance, in England, which is the world's best cosmetic market outside of our own, the percentage of allowed manufacture has been steadily reduced until now it consists of 20 per cent of the amount of sales for the last six months of 1939 and the first six months of 1940. Coupled with this has been a widespread plan of nucleus factories which has worked exceedingly well in making the most of available factory space and saving labor. These factories, after pledging a certain volume of turnover resulting from the taking in of visiting companies, have been officially granted protection in their employment of labor, and enjoy various other government favors. No complete national survey has been published, but reports from a number of these factories indicate that production has been maintained at extremely low cost, so that the percentage of net profit has been better for some of the companies operating on the reduced quota than in peace time.

Now the British government is saying to the cos-

*Abstract from address before Federal Wholesale Druggists Ass'n.

metic manufacturers, nucleus factories and all, you must move your plant to areas which are not required for war production. Hazardous spots in East End of London and in Croyden and out of the way places such as Cornwall and Scotland have been offered our industry, and those companies accepting will be given a brand new quota of 50 per cent of the calendar period mentioned. Failure to move means the loss of nucleus status and the loss of the 50 per cent quota. Each manufacturer can, of course, select his new location in these different areas, but some idea of what this means can be gained from the fact that factory space in England is almost unobtainable and those of us who are moving away from modern, light and well-ventilated plants in the London area to barns, warehouses and moving picture theatres in districts where intelligent female labor is unobtainable, have a trial by fire in store.

SPIRIT OF COOPERATION NEEDED

Understand, please, that this picture is given merely to indicate what we may expect in the U.S.A. It is not inspired by pessimism, but merely by a desire to let you know what manufacturers think is just ahead. Even if it were permissible to lay in huge inventories, nothing would be gained, since there are not large enough stocks to permit our customers to buy in advance. The best thing that can come from a clear understanding of the situation is a spirit of cooperation between manufacturers and their distributors in an effort to work out the problems that will constantly arise from now on, caused by shortages and changes that none of us can foresee or prevent.

AFTER THE WAR OUTLOOK

What about after the war? I visited Europe in 1919 directly after the Armistice and saw in ruined Soissons, Rheims, and in occupied Louvain, under the shadow of the wrecked cathedral and library, little perfumeries opening up with pitifully small stocks, but giving the inhabitants the first taste of luxuries they had known in four long years. I saw on the banks of the Marne quite near Chateau Thierry, before even the barbed wire had been cleared up or the bridges repaired, a little factory resuming its manufacture of manicure sticks and emery boards. My mind also goes back to the experience of Russia where cosmetics were completely banned by the Soviets, resulting in a lucrative bootleg traffic from Poland, and finally in the establishment of a government monopoly under a special toilet goods commissar. Finally there is the well-known example of Germany where the use of cosmetics was banned by decree. They finally discovered that to ban cosmetics they would have to put the entire female population in concentration camps, and at last reports, just before it became illegal to correspond with Germany, we learned that even though war-torn and poverty-stricken, it was still one of the most prolific cosmetic markets in the world.

The experiences of the last Armistice period will

be repeated when peace returns. So long as women desire to be attractive, the cosmetic business will thrive. It is a vital industry going back more than 3000 years, and just as it has survived a hundred wars so it will survive this one and remain in generations to come a profitable and interesting volume of business for manufacturers and distributors.

A Report on Reports

A LEADING business man, who took time out to make a survey of government reports his organization must fill out, came up with the astounding fact that his office averages one report every 14 minutes of every working day.

Plan for Post War Era

IMMEDIATE analysis of research facilities, distribution and advertising plans, with a view to preparing a practical program for post-war execution, is urged on management by the National Assn. of Manufacturers.

A checklist distributed to 8,000 NAM members, in an effort to stimulate consideration of post-war planning, recommended the appointment of a special committee within each company, comprising production, sales and research executives, to assume responsibility for projecting current thinking into the trying days ahead.

Among the observations and suggestions set down were the following:

1. No company is too small to carry on or participate in research and development work in order to develop new products, new materials and new designs to be introduced after the war is over.
2. Prepare a sound sales, sales promotion and distribution program to implement a sound research and development program joined with a program of increased productivity and lower cost to the consumer.
3. Maintain for the duration at least a skeleton sales and service force which can be quickly expanded after the war.
4. Maintain an adequate advertising program adapted to the present situation and stressing the proper use of products; the experience of the last war proves that those companies which kept their names before the public during the war fared best in the post-war period.
5. So far as possible utilize the pre-war distribution system in the marketing of new products, except where lower distribution and service costs can be put into effect through establishment of more efficient distribution and service methods.
6. The distribution of used equipment and machinery after the war is over will be a national problem as well as a problem of each individual manufacturer, and each should give the matter careful attention.
7. Develop products and adaptations of present products to make them actually suitable for foreign distribution; continue to cultivate the good will of foreign distributors even though it may be impossible to supply them at the present time.

THE PRODUCTION OF OIL OF LIMES

*West Indian lime industry . . . Arrangement of seed beds
. . . How and when the seedlings are planted . . . Cultivation of trees . . . Full bearing trees in eight years*

by DR. ERNEST GUENTHER

Chief Research Chemist, Fritzsche Brothers, Inc., New York, N. Y.



FLAT or gently undulating lands are considered most suitable for lime cultivation; they may extend a considerable distance from the coast up the valleys. It is quite possible to cultivate limes even on fairly steep slopes, provided the soil is braced by numerous boulders and the trees are carefully terraced and manured. Of course, lime trees raised on steeply sloping former jungle land, fed with vegetable matter from forests above the plantings, cannot be expected to bear as good crops as trees grown under more normal conditions. At any rate, if planted on the slopes of valleys, the plantings should be exposed to the sun and well protected from winds. The best crops are obtained in rich soil and sheltered locations, at altitudes from sea level up to 800 feet, with well distributed rainfall varying from 80 to 160 inches yearly, 60 inches being about the minimum. Limes can be grown under varying conditions, provided the rainfall is sufficient and the dry season not too prolonged. In districts with very heavy rains, the terrain must be drained effectively. The average temperature should be about 80° F. in the shade.

As far as soil is concerned, the rich coastal plains and valleys with light, black soil offer the ideal conditions, but the red soils of the uplands also are suitable. The lime tree, a surface feeder, flourishes



Limes can be grown under varying conditions but the best crops are obtained in rich soil and sheltered locations with well distributed rainfall and at altitudes up to 800 feet; extensive lime plantations in Dominica, British West Indies

in comparatively shallow soil overlying heavy clay. It prefers to grow amid bushes or in thickets without large shade trees. According to A. P. Hanson,⁷ surrounding vegetation, such as cassava, protects the trees from scale insects during the critical period of their growth and affords necessary shade.

The seed beds should be laid out in a sheltered corner on well-drained, thoroughly tilled soil. They are 4 to 5 feet wide with paths 2 to 3 feet wide running between. Before being sown, the seed must be carefully washed in order to remove the enveloping mucilage; this is done for protection from rats. The seed then is dried in the shade and sown before losing its vitality. The seeds are sown thinly, about 1 inch deep and 8 to 9 inches apart. When the seedlings are 4 to 6 inches high they may be transplanted in nursery beds prepared like the seed beds. For this purpose the young plants are carefully lifted with forks, the rootlets trimmed and the stems topped. The roots are kept moist and covered while out of the ground. The seedlings are spaced about 8 to 9 inches apart in the nursery beds so that a bed 5 feet wide and 100 feet long produces approximately one thousand strong plants for setting out in the fields.

The lime tree is a relatively hardy plant which requires no protection from the sun. The young seedlings, however, must be treated very carefully in order to raise vigorous plants with a strong root system. In order to assure such a root system, the soil of the nursery beds must be thoroughly broken up; otherwise, the young plants cannot be lifted and transplanted without damage to the roots and heavy losses. The young plants are raised in the nurseries until about 16 to 18 inches high and then planted out in the fields. It takes from ten to twelve months from the sowing of the seed to the time of setting out. Since the young seedlings speedily absorb available nitrogen from the soil, it is impossible to raise several crops in the same nursery beds unless heavy dressings of organic matter are added. The nursery usually is changed to another location.

The seedlings should be planted out in the fields

⁷ "The Cultivation of Lime Trees," *Journal of the Jamaica Agricultural Society*, v. 41, #7, July-August, 1937, pp. 427-433.

from June to December, preferably in June or July, in order to assure satisfactory growth before the dry season commences. For this purpose the seedlings are lifted with forks from the nursery beds and the ends of the branches cut back 3 to 4 inches. Any damaged or torn roots should be trimmed carefully with a sharp knife. The plants then are bundled, placed in baskets, and carried to the fields. The roots are kept moist continuously; they must never be permitted to become dry or exposed.

On land previously cultivated, small, very slightly raised beds are forked; but on newly cleared jungle land, holes about 18 inches deep and 12 to 15 inches square should be dug before planting out. In very heavy soil, however, the system of holes is not advisable because they easily form water traps during the rainy season, causing root decay and check in growth, if not death. The seedlings should be planted out at about the same depth as they grew in the nursery beds, which is clearly indicated by the color of the stems. Too deep plantings should be avoided. After planting, the space around each plant is kept clean and tilled. Brush and grass springing up are cutlashed. Any trenching necessary to drain the soil or prevent washing away should be done *before* planting, as it may be injurious to the young trees.

SPACING OF TREES IMPORTANT

Planting at the proper distance is a very important problem and has much bearing upon the future growth of the crops. While the lime tree develops a tap root, most of the feeding is done through a very wide system of fine rootlets extending close to the surface of the soil. Crowding of the trees causes crowding of the tops with many branches so interlaced that they die. Trees attain a greater size in hot valleys near the coast than in the hills. On steep slopes where conditions of growth are not so favorable, a distance of about 12 by 12 feet or 12 by 14 feet may be sufficient, but on fairly good land 15 by 15 feet or 16 by 16 feet is the usual distance. In localities of very good soil and abundant rainfall, 20 by 20 feet is preferable, while on exceptionally rich soil 25 by 25 feet is not too wide. It is a common mistake to plant the trees too closely rather than too far apart. Adequate provision must be made for roads, drainage and windbreaks. The trees must be planted in straight rows to allow for drainage. Exposure to wind has a dwarfing effect upon the lime tree, and the flowers fall off easily. Therefore, hedges should be planted as windbreaks, if the higher surrounding land does not afford protection. *Calophyllum calaba* and *Inga laurina* may be used as permanent windbreaks, while sugar cane and *Glyricidia maculata* make good temporary shelters. The weeds around the young plants are kept down by cutlashing. During growth of the trees a great deal of spraying is necessary.

Since the root system of the lime tree feeds on the surface, tillage must be performed very cautiously. It is primarily necessary to maintain the humus by careful green dressing, mulching, green and perhaps artificial fertilizing.

Soil, climate and method of planting are the main



Workers select lime fruit by hand and pack it into barrels for shipment. Only the green limes are exported while the riper yellow fruit is trucked to processing plants for conversion into juice, etc. Above, sorting fruit in Dominica

factors influencing growth of the trees and bearing of fruit. Under favorable conditions the trees may yield small crops in the third year after planting, but eight to ten years usually pass before the full bearing stage is reached. If grown under suitable conditions and if undamaged by wither tip diseases, root rot, insect pests and cyclones, the trees reach a considerable age without losing their vitality. There exist plantings forty years of age and older which still show no signs of abating in regard to fruiting qualities. The trees require little pruning, except that all water suckers and dead branches must be removed because they tend to choke the bearing branches and cause them to die. If a tree loses a main branch, the wound surface is smoothed and tarred and fresh growth is trained. When the main branches are formed, the weak underbranches are cut off.

HARVESTING THROUGH ENTIRE YEAR

An interesting fact about the lime tree is that it bears flowers and fruit simultaneously and all year around. Thus, small quantities of fruit may be collected throughout the entire year, although the main harvest takes place from June-July to November-December. At that time the trees are in full bearing. Yet, the cropping often takes place according to commercial demands for fresh lime fruit. An interval of four to six months is required for development of fruit, from the flowering stage to ripening. Fruit which ripens from June-July to November-December is developed from flowers appearing from February to June.

The produce of a lime plantation is marketed either as fresh edible fruit or in the form of by-products such as clear juice, concentrated juice, distilled and coldpressed oil, and citric acid. As the fruit ripens on the trees it turns from green to yellow and when fully ripened drops to the ground. For shipment of fresh limes, the fruit must be picked as it reaches full development and just before the process of ripening begins. Fresh limes are generally green limes; in other words, they are green in the sense of not being fully ripened. They must be green to be accepted on the market. No native of the West Indies would ever think of using a fully matured yellow lime fruit for making a

beverage. When the originally green fruit reaches consumers in America and England, it often begins to turn yellow and become ripe.

GREEN AND YELLOW FRUIT PICKED

In actual practice, the harvesters go through the orchards and pick both green and yellow fruit, including windfalls and over-ripened fruit which has dropped to the ground. On some islands ladders are used to pick the fruit which cannot be reached by hand, or the harvesters employ long hooked staffs by means of which the fruit is reached and taken down, to be collected in baskets. Evidently, it is much cheaper to harvest green and yellow fruit at the same time. Green fruit is valued about three times as high as yellow fruit, much of which may be picked up from the ground.

The harvested fruit is transported to packing houses and carefully assorted. Green fruit is wrapped in paper and packed for export in barrels, while the riper yellow fruit is trucked to the processing plants for conversion into juice, oil of lime and citric acid, as we shall describe later. Whenever the market demand for green, edible fruit slackens, the portion which cannot be shipped is also used for processing. In fact, green fruit would be preferable, as it gives a higher yield and a much better quality of juice and oil, but under normal marketing conditions green fruit is too expensive and the better yield does not justify the increase in cost. In most cases, the fruit employed for conversion into by-products consists of a mixture of green and yellow limes, the latter usually predominating.

YIELD OF FRUIT PER ACRE

Depending upon conditions of soil, climate and cultivation, the yield of fruit varies greatly. Under favorable conditions it might be 150 barrels (one barrel holding 160 pounds) and even higher in exceptional cases. On an ordinary planting, 80 to 100 barrels may be considered a fair average.

DISEASES, PESTS AND HURRICANES

During the past twenty years the West Indian lime industry has suffered tremendous losses on account of these factors, and on some islands lime plantations were almost wiped out. Great efforts on the part of growers and government were required to revive this once so prosperous and remunerative industry.

1. *The wither-tip disease* damages the flowers but does not kill the trees. It occurs primarily in the higher altitudes where the atmosphere, because of monsoon clouds, is generally moist. The small branches with their attached flowers and fruit simply wither and dry. In St. Lucia, for instance, production of limes in the high rainfall areas has been impossible since the first setback in 1927. Dominica suffered its worst attack in May, 1922.

2. *Red root fungus (Sphaerostilbe repens)* grows on the underground roots and prevents them from feeding, thus killing the tree. Dominica experienced an outbreak in 1926 but the most damaging one was in 1931.

3. *Attacks by the citrus weevil and the fiddler beetle.* The lime roots are attacked by larvae of

weevils of the genus *diaprepes* (root grubs) and *prepodes*. St. Lucia suffered from it in 1933, Dominica and Montserrat similarly. The roots are girdled or channeled by the larvae, and the tree may succumb under extremely heavy attacks. R. G. Fennah^{*} recommends as protection the baring of the crown roots and the application of lead arsenate to the soil either as a layer on the surface or mixed with the soil along the larger roots. The presence between the trees of the cover crop, *Tephrosia candida*, itself unacceptable to the weevils, might help to repel them. A further approach to the problem is the use of well selected trees of vigorous type for distribution to estates.

4. *The dying out en masse of mature seedling trees from undetermined causes* has done serious damage on St. Lucia, Montserrat, Trinidad and Tobago. Some attribute this to the fungus *Sphaerostilbe repens*, others to damage by larvae of the citrus weevil (*diaprepes*). An attempt was made to replace seedling plants with young budded plants, but in St. Lucia the young budded plants when set out in the fields were also damaged severely by larvae of *diaprepes*.

5. *Periodical hurricanes* have done tremendous damage to some of the islands; for instance, to Dominica in 1926, 1928 and 1930.

If several of these factors operate heavily in a single year on one of the islands, its entire lime industry might be annihilated for several years.

LIME BY-PRODUCTS IN THE ISLANDS

As pointed out, surplus limes which cannot be exported as green, edible fruit, are processed on the spot, before spoiling, into a number of by-products; for instance, lime juice—clear and concentrated, lime oil—distilled and coldpressed, and citric acid.

In the olden days of sailing, no British man-of-war would venture on a long cruise without ample supplies of concentrated lime juice. Vitamins were unknown then but long experience had shown that lime juice prevented outbreaks of scurvy, that age-old scourge of mariners.

The West Indies prospered from the export of

^{*} Loc. cit.



A saucer-shaped copper dish studded with blunt spikes is used in écuelling oil of limes. This old-fashioned method is used almost entirely for handpressed oil in the B.W.I.

lime juice to North America and Europe, and this trade has continued on a smaller scale because lime juice is used widely in English-speaking countries for refreshing hot weather drinks, alcoholic and non-alcoholic, and cocktails.

Prior to discovery of the modern process of making citric acid biologically, it was manufactured in the West Indies from lime juice by precipitating the acid as calcium citrate. There was always a good demand from abroad for lime juice and calcium citrate or citric acid, and prices were so lucrative that distilled lime oil, another by-product, could be sold at low levels. It meant added profit, the emphasis being on lime juice and calcium citrate.

CHANGES IN THE LIME INDUSTRY

Since discovery of the cheaper process of making citric acid and the introduction of numerous vitamin-containing preparations, the whole aspect of the West Indian lime industry has undergone a fundamental change. Citric acid made from lime juice can no longer compete with the synthetic product, and the demand for concentrated lime juice is so limited that many factories discard the lees since the price hardly covers the cost of production. The main product today is oil of limes which now has to bear almost the total cost of operation. The present war is changing the picture somewhat. French and Spanish wine lees are no longer imported, and citric acid can be substituted for tartaric acid made from these lees. Furthermore, there is a growing shortage of synthetic citric acid, particularly in Central American countries and, therefore, citric acid made from lime juice is again in demand. Clarified lime juice, too, is coming back into favor for making lime juice cordials, syruped juices, which the addition of water converts into non-alcoholic refreshing hot weather drinks, very popular with the armies and navies of the United Nations.

CHIEF USE OF LIME OIL

Distilled lime oil remains the chief flavoring ingredient in carbonated, non-alcoholic beverages of the ginger ale type, also in the popular "cola" drinks, not to speak of food products, confectioneries and candies.

There exists also a certain but more limited demand for the so-called "coldpressed" or "écuelled" oil of limes which possesses a very fine, true-to-nature odor and flavor. Its high price has always prevented wider application.

HANDPRESSING OF LIME OIL

In the West Indies most of the so-called handpressed or coldpressed lime oil is still manufactured according to the old-fashioned method of "écuel-ling." The *écuelle* is a simple instrument introduced from Nice, southern France, where small quantities of lemon oil were made many years ago. It consists of a saucer-shaped copper dish, about nine inches in circumference, studded with blunt brass spikes about three-quarters inch long; in the center of the dish is a stout, hollow brass handle closed at the bottom which serves as receptacle for the oil as it

flows from the cells of the peel. Holding the *écuelle* between their knees, the workers, mostly women and girls, roll the fruit with firm hand pressure over the blunt spikes; the oil sacks of the peel are ruptured and the oil, together with watery cell liquid, flows into the handle. The oil and water mixture is then poured into a bottle. Upon standing for a short while, oil and water separate into two layers and the oil can be decanted. It is then filtered and shipped. Prolonged storage often causes separation of a yellowish crystalline deposit consisting mainly of limettin.

The workers are paid according to the quantity of oil they produce, the individual's daily output depending upon his skill. A skilled operator can extract as much as three to four ounces of oil per hour, but usually the quantity is considerably less.

OIL YIELD DEPENDS ON FRUIT QUALITY

Yield of oil depends upon quality and condition of fruit, fresh, green fruit yielding more oil than yellow fruit. The yield per barrel of fruit (160 pounds) is 1¾ to 4 ounces of oil, usually 2½ to 3 ounces, representing only one-quarter or one-third of the theoretical yield. This poor yield is due to the fact that the spikes of the *écuelle* not only rupture the oil sacks of the peel but also pierce the white spongy layer of the skin which absorbs and retains the oil.

The fruit thus deprived of some of its essential oil is usually submitted to further processing, but the juice obtained by crushing this fruit is inferior to juice pressed from limes not previously *écuelled*. It is deficient in essential oil and lacks richness of flavor.

Several attempts have been made to replace the process of *écuel-ling* by machines. Years ago, a large operator in Dominica imported a Vinci machine, as used in Sicily for the extraction of lemon oil. However, he ran into considerable difficulties, obtaining heavy emulsions of oil and cell liquid which he was unable to separate. Those early Sicilian machines were constructed for the treatment of lemons which have much tougher and thicker skins than limes. The colloidal (albuminous, pectinous and waxy) matter present in the lime peel and in the white spongy layer beneath easily forms emulsions. Perhaps it might have been possible to overcome these difficulties by applying the Bennett process which uses as carrier fluid for washing the liberated oil from the fruit a dilute solution of sodium bicarbonate and sodium sulfate. The emulsion is separated by centrifuging, and the aqueous portion is used over and over again.

USE OF MACHINES IN ÉCUEL-LING

In the years preceding the present war, some of the Sicilian machines, especially the Avena machine, were greatly improved by the insertion of specially constructed corrugated metal and glass plates. Thus, it became possible to process in these machines even the thin-skinned lime.

In Mexico, as we shall see later, coldpressed lime oil is made not by *écuel-ling* but by crushing the entire fruit under heavy (Continued on p. 81)

PREVENTING INDUSTRIAL DERMATITIS

War industries enlarge market for special creams . . . Purposes for which they are useful . . . Ingredients and proper formulation of two types . . . Protective properties required

by MAISON G. DENAVARRE

INDUSTRIAL dermatitis, the breaking out of the skin in some form or other, has always been present but this fact only recently has been given much attention. The large scale war production program has brought many women into the factories, and they have not hesitated to complain about these skin ailments as they showed up. In addition, many men who formerly worked in offices are now in the factories. They too complain of skin dryness, pimples and other discomforts.

As a result, within the past year, a number of so-called "protective creams" have appeared on the market. These products are not *protective* because the word implies too much. For example, such a cream will not protect the hands from being blown off as a result of an explosion, or from being cut by flying missiles. Yet such protection is implied by the title of the product. The creams therefore are mislabeled, and such mislabeling may bring these products within the purview of the Federal Trade Commission or the Food & Drug Administration, or both. They could more properly be called "industrial creams" or by a trade name such as "Sentry Hand and Face Cream" or "Guard" or "Patrol brand Industrial Cream."

INDUSTRIAL DERMATITIS

Skin irritation, resulting in an itch, redness, pimples, rash, cracking of the skin, blistering, dryness of skin, warts, eczemas and other unnatural demonstrations, is commonly referred to as *industrial dermatitis*, if it is a consequence of contact of the human skin with the air, materials worked with or both. Industrial dermatitis does not limit itself to the outside skin but also can occur in the mucous membranes of the nose, mouth and throat.

Many of the materials worked with are not irritants in themselves but a sensitivity to them usually can be acquired. Cutting oils are a good example of this class. Other materials are irritants and if brought in touch with the skin will result in an irritation. Such materials are many, especially in the case of war materials. Examples of irritants are tetryl, TNT and other explosives, war gases, solvents, fumes resulting from soldering or welding, electroplating, pickling, rust treatments and others.



War work focuses greater attention on industrial dermatitis

Two types of creams form the basis of "protection" against industrial dermatitis; one is greasy, the other is a dry or vanishing type. With these two types, it is possible to give protection to most individuals. For some purposes, special ingredients may be added to counteract the particular irritant.

For cutting oils, a cream based on stearates is very useful. The presence of a small amount of vegetable or animal fat is also useful, since animal or vegetable fat offsets the drying effect of cutting oils. Creams containing water soluble resins have been found less effective than those not containing them since perspiration tends to soften the film and wash it away. The inclusion of wetting agents and dry pigments is also helpful. In any event, the cream should leave a film that is flexible under all conditions so that no unprotected areas are formed. Regardless of its formula, the product must be easily removed upon washing with water.

People working near or with electroplating baths get the most protection by using grease-type creams. The cream should be applied to all exposed surfaces and into the nostrils. However, the cream must be properly formulated if it is to be applied to nostrils or the individual may get the grease into the lungs by way of the breathing route. The American

Medical Association and the FDA have warned about the use of hydrocarbon preparations for this purpose because they collect in the lungs and may cause Lipo-pneumonia.

Protection against solvents requires a greasy application that is insoluble in the solvent used. Dr. Louis Schwartz, of the U. S. Public Health Service, recommends a mixture of 70 parts lanolin and 30 parts castor oil. Other mixtures undoubtedly would serve.

NEUTRALIZING ACID FUMES

Welders and solderers are exposed to fumes of hydrofluoric and hydrochloric acids. Creams should be applied to the face and hands that tend to neutralize these highly irritating acid fumes. Chalk comes to mind at once but the resulting calcium compound formed is practically as irritant as the fumes. Aluminum hydroxide, magnesium trisilicate, and similar adsorbents or neutralizers can be used. If the preparation is made up in a soapy vehicle, chalk, milk of magnesia, magnesium carbonate and similar materials can be used since the soluble salt formed would react with the soap to form an insoluble metal salt.

Workers handling explosives of most any type suffer from skin sensitization. Tetryl seems to be the worst offender. The powdered material when combined with friction is the guilty union. Workers should place a greasy ointment or cream in the nostrils. The face and neck can be protected with a mixture of water soluble resin, zinc oxide and iron oxide, according to Schwartz. Another product useful, according to the same man, is the U. S. Public Health Service ointment for the prevention of poison ivy dermatitis. This is an ointment consisting of 10 per cent sodium perborate in a vanishing cream base. It would be this writer's opinion that such an ointment would have to be freshly made. If an oxidizing agent is desired, zinc peroxide could be used and would be less harmful upon hydrolysis to the user than would sodium perborate which breaks up into oxygen and sodium hydroxide. Zinc peroxide hydrolyzes into oxygen and zinc oxide.

There has been no satisfactory ointment or cream made that gives protection against war gases of the mustard or lewisite types. While oxidizing agents (such as bleaching powder) change the basic chemical structure, the product of reaction of one (lewisite) is just as poisonous as the lewisite itself. However, work now is being done to develop such ointments.

Considerable industrial dermatitis results from the use of hand soaps and cleansers containing abrasives. To overcome this, special cleansers should be used. These in turn should be followed by an application of an emollient preparation such as a superfatted hand cream.

REQUIRED PROPERTIES OF PROTECTIVES

Schwartz has summarized his findings, and recommends that "protective" ointments should have the following prerequisites:

1. They must be non-irritating and non-sensitizing.
2. They should give actual protection from the irritant.
3. They should be easily applied.
4. They should adhere during working hours and be easily removed after work.

To obtain these properties, thorough study of the particular need should be made. Thus, an ointment or cream that protects against cutting oils probably would be useless against tetryl. A product useful against the fumes of welding or soldering would wash away if used to protect against cutting oils, and so on.

FORMULATION

The non-greasy type can be made satisfactorily on a vanishing cream basis, using stearic acid or one of the polyhydroxy stearates in conjunction with a suitable alkali if needed. The necessary additional properties can be obtained by the inclusion of suitable ingredients. Thus, the use of animal or vegetable fats is desirable in some cases. The addition of wetting agents tends to make removal easier. The use of mucilages gives solvent insoluble films. The introduction of sodium or zinc perborates renders the product effective for tetryl workers. Intensifying the acid neutralizing properties with, say alumina gel, magnesium hydroxide, sodium bicarbonate, ethanolamines and the like serves another useful purpose.

The greasy creams probably are better applied in the form of emulsions which will lose their water upon use. Better penetration thus is obtained without the resultant greasy feeling. For many purposes, an absorption base mixed with lanolin and, say, castor oil, will be a good mixture, easy to emulsify and effective in use. The inclusion of certain neutralizers will make this product effective for use by workers handling solvents, or by welders and platers.

ACKNOWLEDGEMENT

A report made by Dr. Louis Schwartz, of the U. S. Public Health Service, is the basis upon which this article was written. Dr. Schwartz made his report* after surveying some 30 government arsenals and armories, together with 14 privately owned airplane factories, employing a total of about 250,000 workers. The writer has applied the findings in this report to possible production of effective creams and ointments to be used by workers coming in contact with industrial hazards which generate dermatitis.

Three-Point Economic Program

REPEAL of the Robinson-Patman and Miller-Tydings Acts and elimination of state trade barriers are essential factors in a three-point post war economic program offered by *Fortune* magazine. The two federal acts, it contends, rook the consumer.

*Industrial Dermatitis in Our War Industries, L. Schwartz, *Ind. Med.* 11, No. 10,457, 1942.

THE GOSSIPING GUIDE TO THE NEWS

How packaging materials are being conserved and waste eliminated . . . Why feature lower prices now? Single window displays . . . Advertising . . . Trends

by RAYMOND W. LYMAN

CONSERVATION of materials and elimination of waste is big news in every plant today. Materials are saved which would have been too expensive to conserve several years ago. Scrap cardboard, for example, is now baled in 600-pounds units and returned to the manufacturer to be remade into raw cardboard.

HOW SHULTON SAVES PACKAGING MATERIALS

I ran into Miss Miriam Gibson, of Shulton's, late one afternoon just after she had returned from the plant. Her description of her concern's conservation methods was so enthusiastic that I've been keeping my eyes open for short cuts to economy ever since.

Beginning with the outside cartons, cardboard is used in a one-piece model instead of the former double-wrap. More units are packed to a case in an attempt to save too many small packing jobs.

The cardboard boxes, hand made to hold the gift sets, are also economy packages. The board is brought up straight; the corners being re-enforced with a kind of buckram. The wood veneer is replaced with a bright wallpaper and the box lined with a gay red. To the eye of the casual customer, the box has the same catchy appeal; the double lining will never be missed nor will the wood veneer.

The manufacturer has added extra inspectors to watch for and eliminate waste. Bonuses are given for useful conservation ideas.

Since the plant has always done hand-work and made its own tools, the company decided it could fit into machine-tool production in the war effort. So it got a sub-contract and started training additional people for the delicate hand-work required.

Counter display cards seem to be stressing price more than formerly. It hardly appears sensible at this time. With shortages looming, the products as

now packaged will disappear from the scene for the duration. Certainly the advertising of Giant Size now \$1.19, formerly \$1.98, is outmoded. Why not begin the new technique gradually, while there's some of the old merchandise left, and not just let the public exhaust the stocks carelessly? Personally, I think the public is sick and tired of the old sales approach.

The only effect I could ever find of the two for one offer, was to make the customer very sure the product was never worth any more. And of what real use were cosmetics or toothpaste anyway? These people then read a lot of drool from consumer groups attacking business in which they never would have been interested had not the advertiser offered slashed prices. Let's go back to selling a product—not a sale!

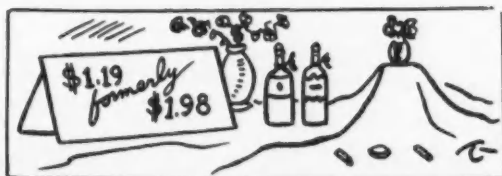
Waldo Reis, chief chemist of van Ameringen-Haebler, Inc., feels that the chemist, in breaking down the essentials to basic chemical formulas, is going to find many an interesting item for future use as he searches for substitutes. He also points out that, although a bouquet of a certain character may not be produced, others of an acceptable, agreeable quality will be.

WPB is in a fearful spot as it tries to figure out fuel, transportation and machinery bottlenecks. What is most important in the war program? It is certain that the best brains of the country are needed to work out this three-fold problem.

PLASTIC CONTAINERS AFTER THE WAR

In spite of having to spend most of the time in cracking current problems, a corner of the minds of executives in the plastic and molding industries is being given to the future, according to Frank Mahr, of Norton Laboratories, Inc. The after-war world is going to be built up with plastics, he feels. Which type of plastic will predominate—clear or opaque? The possibilities of each are endless. Industrial designers are developing new surface handlings.

Where before the war molders were able to cover up a poor design with folderol they now are confronted with the simplicity of a basic package design. As a consequence design is improving and a new consciousness of texture is developing. Out of this will come new forms. Opaque and clear plas-



Cut prices are psychologically unsound when shortages loom

tics will take on as many forms as glass has in the past. Plastics capable of greater heat resistance will be produced.

Cellulose acetate also will disappear from the market as soon as the stocks on hand are made up, which will take some time. So better start thinking now of using something else for these sifter tops.

MORE USES FOR PAPER

Paper uses increase from day to day. Paper dipped in a new plastic for reinforcement. Paper made into a hundred new shapes and uses. But, fearful lest wood pulp be made directly into smokeless powder, several new paperlike by-products have also been experimented with. These by-products will be rushed into the field should a paper shortage loom. Right now they're expensive because there's no use for them. But they're an ace in the hole in case they're needed.

Miss Elizabeth Arden is emphasizing feminine daintiness for factory and defense workers. A handy kit, kept in the locker, is urged to ensure a



Defense workers want cleansing and protective beauty aids

thoroughly cleansed face, freedom from biting acids or irritating abrasive dusts. Taking a leaf from British experience, she is educating her salespeople anew along basic lines of skin protection.

Uniforms and slacks call particular attention to the face, she believes. In contrast to masculine attire, the features become more prominent. Make-up is of paramount importance—softly natural for the day-time job, high-lighted for evening glamour.

CAREFUL GROOMING FOR GLAMOUR

Paying especial attention to requests from the service men, she begs the girls to transfer to their most feminine frocks—after a day in uniform. The men get sorely sick of uniforms. Velvets, chiffons and big, dashing hats (or small beribboned or beflowered ones) make a picture for a man to carry in his mind's eye. And a delicate scent and careful make-up complete the appeal. Therefore, she's talking careful grooming for glamour. And that's a pretty good slogan for today, it seems to me.

Lines are tremendously simplified, of course. But they're brightly presented. The public won't really feel the pinch for several years yet. And it will be highly amused with a number of hitherto unthought-of products.

Storage is becoming a paramount problem as is the re-distribution from wholesalers' warehouses. . . . Trade papers will be relied increasingly upon to carry sales messages to stores as the sales force goes into the armed service or into defense work. So say the heads of sales in many businesses. This indicates a change in copy from mere trade-name

advertising to performing a real selling job. A quickened pace in copy is already noticeable. In fact, I believe trade-paper advertising is infinitely better and more sure of itself than advertising meant for the consumer. The reason is not hard to find: it's selling a product!

SINGLE WINDOW DISPLAY SUCCESSFUL

R. P. Leube, Jr., of Parfums Schiaparelli, has been tying in with masks for a successful store-window promotion. He believes that the simpler the idea is today, the better the public response to it. He feels that an uncluttered presentation has far more effect on the tired mind than an elaborate one would.

Carrying out this credo, he advocates the use of flower windows to emphasize a floral odor. The simplest accessories should be used with flowers; otherwise, the effectiveness is lost. The flowers carry the sales message—a scroll with the name of the perfume and one or two bottles of the fragrance are all that's needed for a dramatic impact on the passerby.

A simple background is also used for the mask series. Each of six windows carried a different make-up on the masks, which was repeated in the make-up of the single dummy used in each case. Make-up according to costume is a story the public never tires of seeing. Simplicity and quality are the timely keynotes.

USE DIRECT SALES APPEAL IN ADVERTISING

Trends . . . Machinery is being carefully handled, as never before, to prevent break-downs. There's no knowing when replacements will be available. . . . The new products which the chemists



Searching for substitutes, chemists will find new materials

are developing will have to be properly advertised to get the public to accept them. Remember that Mrs. Johnny Q. is very tired of the "morale" approach. Also drop the victory angle, if you'll take my advice. The lighter, humorous tie-ups have gone great-shakes in English advertising. So has the direct sales copy. I know I, for one, would be very glad to see that such-and-such a soap should be bought because it's the best on the market. Not that its president was heart and soul behind the war effort. Or that a certain store had it for sale. Let's get the same fervor into our consumer advertising again that we have in the trade-paper copy: let's sound as though we believed in our own product, not apologetic about it! . . . Fuel shortages more acute in prospect than ever.

Mrs. Hortense Odum, chairman of Bonwit Teller's board, has been having a cosmetic conservation drive. The girls are teaching the customers

care in use of powders, closing talcum tops, setting bottles away from edges to avoid breakage, keeping perfume in the dark so it won't lose color and get heavy, etc. Buy quality products, then take care of them, is her customer motto.

The constructive approach of the cosmetic trade to its problems is a much sounder one than the negative scolding of so many government heads who are currently telling the public what it won't have. Tell them instead what they *will* have! No one wants to use strategic materials and certainly the public is universally behind the war effort. But let's not discourage the public. If we can't have plastics, we'll use wood; and we'll use all our substitutes with a right good will. But let's not be down-hearted about it. One and all—let's stay on the constructive side!

Lead Absorption from Tubes

THE Packaging Institute at its recent meeting called attention to the results of experiments with toothpaste made by one company several years ago and for another company more recently. These experiments indicated that under normal conditions of brushing no more than 5 per cent of the toothpaste used is retained in the mouth, although presumably children might swallow a considerably larger proportion. On the basis of these data a table was prepared which presented an interesting comparison between the possible lead specification in toothpaste with the present specification of allowable lead (from sprays) on fruit.

Under the prevailing specification for apples (seven parts per million, or 3.2 milligrams, or 0.5 grains per pound) a four-ounce apple would contain 0.8 mg. of lead. This amount, in other words, would be the lead intake from apples alone of a person who ate the proverbial "apple a day." On the other hand, a person retaining 5 per cent of the toothpaste from two brushings (estimated at 1.4776 grams) would take in only 0.074 grams of toothpaste. If the paste contained 100 parts per million of lead, the amount of lead left in the mouth would be 0.00074 mg., or less than 1/100th of the amount of lead ingested by the person eating the four-ounce apple carrying the maximum lead permitted by the tolerance specifications. This indicates that under normal conditions the danger of poisoning from lead in toothpaste is negligible.

One means of protecting against lead absorption into the product that is very promising is coating the inside of tubes with a suitable wax. The Technical Committee of the Packaging Institute reports that experience has shown a high degree of protection afforded by such coatings. Composition of the wax used might vary for different types of toothpaste. Also, in some cases there appears to be a buffering action due to the chemical formula of the paste, even where wax protection is not provided, which results in very low lead absorption.

Similar results were reported by Dr. White, of FDA, from examination of vaginal jelly packed in wax coated alloy tubes. These were stored at

120° F. for several weeks and then analyzed for lead absorption. The lead content was found to be very low, running about six to nine parts per million. The wax coating was still in excellent condition, the tubes were not discolored and had a very good appearance.

The conference of the Packaging Institute committee with the FDA officials was arranged because it was believed wise to have thorough discussions in advance, in order to avoid as far as possible attacks by headline seekers or damage-suit lawyers. In one case, it was recalled, a man was supposed to have committed suicide by eating the contents of a tube—when, as a matter of fact, the results would have been the same if he had eaten the same quantity of table salt. The present attitude of FDA was summarized by Dr. Dunbar as follows:

(1) The FDA has not been concerned by the amount of lead absorption that has shown up so far.

(2) They will not be as well satisfied with the use of a 5 per cent tin coated lead tube as with tubes having a higher tin percentage, but they feel this is a matter for the WPB to decide upon the basis of metal supply.

(3) The FDA appreciates the work done by the Packaging Institute Technical Committee and their frankness in discussing the matter. It is hoped that the committee will continue its work, particularly on the 5 per cent tin coated tubes and alloy tubes, and keep the FDA in touch with developments as they occur.

(4) Unless a material number of tubes show lead absorption higher than 100 parts per million, the FDA will not be concerned. If the committee finds this becoming a usual occurrence, Dr. Dunbar would like to discuss the matter again. At the present the FDA is not prepared to state that absorption higher than this quantity would be considered dangerous; but under such conditions they would want to check into the matter more thoroughly.

(5) In view of the cooperative effort that has been made, should the FDA find conditions which they think deserve attention, they will discuss them either with the individual company concerned or with the Institute before making any seizures or publicizing their findings. The FDA attitude in such cases would be tempered by the past performance of the company; i.e., if the company had shown good faith in trying to do everything possible to avoid lead contamination, the attitude would be different than if such precautions had not been taken.

(6) Dr. Dunbar believes that internal waxing is a wise precaution and advocates that it be done by all toothpaste manufacturers, particularly on tubes containing 5 per cent of tin or less. It is realized that in special instances tubes might not require waxing, but this should definitely be proved before waxing is eliminated.—*Glass Packer.*

The most beautiful part of the day is at eventide, when the sun sinks into the unknown and the veil of night is drawn slowly across the sky—and so it is in life.—*Howard S. Neiman*

Packaging

P O R T F O L I O

1—*Prince Obolenski*: Gold-crowned flacons introduced the perfume Credo, offered in two sizes, one toilet water. Red velvet lines the boxes.

2—*Germaine Monteil*: The Laughter odor is offered now in toilet water and dusting powder. The same golden theme for packaging continues.

3—*Triple Check Laboratories*: Triple Check lotion, for sun-windburn, infections, irritations, is packed in a flannel and simulated leather bag.

4—*Coty*: Lacquered flowers and leaves on a colored mirror base hold a flacon of perfume for *Fleur Du Lac*. It is available in six odors.

5—*S. P. F. of America*: Bandbox is a new fragrance in the Suzy line, available in perfume and toilet water, in turquoise and white packages.

6—*Milkmaid*: A corner shelf of painted wood—blue or white with floral design—to hang on a wall or stand on a table holds three products.



1—*Dorothy Gray*: Dusting powder and cologne join the perfume, *Lady in the Dark*. The packages are created in the theater stage theme.

2—*Fabergé*: To celebrate the firm's fifth anniversary, a new handmade glass flacon, with ground glass stopper, is used now for the five perfumes.

3—*Schiaparelli*: Embroidered pink or blue satin envelopes are scented with individual sachet pillows which button into the sections for lingerie.

4—*Dermetics*: A saddle-stitched costume bag is replete with five bottles of hydronized oils and an automatic powder puff. It comes in two colors.

5—*Daggett & Ramsdell*: A two way folding top that permits either compartment to be used separately features this new Week-End case.

6—*Tussy*: *Mountain Laurel*, not a new fragrance but it has new packaging and more items, includes cologne, bath powder, bubblescence, soap.

7—*Lucien Lelong*: Collector's Case is hewed from solid French white pickled oak and has glass windows and shelves, also six perfume flacons.

8—*Lentheric*: A gold-tone lining, in sunburst design which rays out from two stylized plums, gleams through this plastic monogram compact.

9—*Marie Earle*: An envelope of checked rayon taffeta stretched over a stiff foundation contains a loose powder compact and plastic lipstick.

10—*Ric Products*: A solid perfume stick, tested for two years, is on the market. It comes in a wooden holder with tip for pushing up stick.



Short Adages

by R. O'MATTICK

Merchandising Note: According to retail merchandising experts, such things as novelty jewelry, handbags, toilet goods are bought on impulse and are known in their parlance as "impulse items". That may be so. We are no merchandising expert to say "nay". Our total active experience in the field of retail merchandising was at the age of fourteen when we helped mind our friend's uncle's shoe store, for one hour. We sometimes wonder for how many hours you have to mind a store to be considered a retail merchandising expert.

A manufacturer has to feel the pulse of his customers' tastes to get them to buy—whether on impulse, COD, DA or down-payment. The young miss from Woodhill purchasing her first lipstick, the movie actress from Hollywood buying her seventy-fourth handbag, the purchasing agent placing an order for ten thousand gross bottles, all act on one or more impulses. In one case the original impulse may be followed by the instantaneous click of the cash register; in another, the chauffeur may finally return the handbag to the refund department of the store, after the actress' maid had already exchanged it twice in one day. As for the bottle order, there may have been two conferences and four rounds of golf with the usual drinks and luncheons thrown in, as well as samples, quotations, confirmations and shipping instructions to boot. But impulses start the thing going. Without Otto Stock's idea of Little Lustrous Lily Lotion (which idea was the result of an impulse) Dr. Rowmaterial would not have worked out the wonderful formula. And someone else might have sold the bottles if Joe didn't get the impulse to drop around. So the merchandising experts will allow us, we hope, to call the order for over one million bottles an impulse item. If there was more than one impulse, so much the better.

Holiday Note: We have already received some packages of Christmas cheer! Two bottles of White Horse (alcoholic), three kinds of after-shave lotion (all non-alcoholic) and from our dear and learned friend, Dr. Rowmaterial, a first edition, "The Poms of Satan" by Edgar Saltus. This volume contains some writing on perfumes and other matters. We quote a passage: "Love of perfumes was due to an intuition that in the ethereal hereafter it is on the odors of flowers that spirits subsist. It is for this reason that the young altars of the old gods were splendid with aromatics. It is for this reason that everything sacred was scented."

Mr. John Stilts (obviously a very prosaic person—but if he is a paid-up subscriber to the *PERFUMER* we forgive him) wants to know why we go in so much for "poetry." Well, we get paid by the column and we can spread less words over more space with a poetic license than without.

This brings us to another but related subject. We feel very low about the lack of contributions to this column, and for a number of reasons. First, it

means that we have to do most of the work so that our ambition to receive money without working for it is frustrated. Secondly, each time the Editor asks how many contributions we got for the next issue we have a terrible thought that what he really wants to know is whether anyone other than he or I read this column. We are convinced from years of close association with perfumers, cosmetic manufacturers, package people, advertisers, executives, chemists, salesmen, promoters, bottle-washers, merchandisers, shipping clerks, importers, etc., etc., that much talent is harbored in our midst so here is your chance for self-expression.

Maritime Note: It is revealing no naval secret to say that Ensign Artie Goldman, formerly with Standard Synthetics, Inc., is now on a cruiser. He writes that when he gets seasick he goes below for a lemon and when he gets homesick for the Essential Oil Business he goes to the medicine-chest and smells a bottle of Oil Peppermint, USP. Another way to prevent both seasickness and homesickness is to read *THE AMERICAN PERFUMER* regularly; we hope your copies are reaching you, Artie.

Gift Suggestions: We have been informed by the special Radio Scout who covers the Air for this Department that Kate Smith collects perfume bottles of odd shape and design as well as rare perfumes. Admirers of Kate can send such gifts to her, care of WABC, New York. Dr. Rowmaterial collects five-dollar defense stamps. His admirers can send those to this scrivener, care of *THE AMERICAN PERFUMER*. And Pat Chouli is collecting Income Tax Anticipation Notes. Unfortunately, these are non-negotiable, otherwise—!

Greetings-and-Best-Wishes Note: That the news from abroad will improve daily, that Christmas will have some cheer and that, on its way, is a better and a happier New Year for all is the wish of R. O'MATTICK.



"When you used the term 'ceiling zero'—were you talking aeronautics or prices?"



SODIUM CHLORIDE IN GLYCEROL ANALYSIS*

*Determination of glycerol recovered from soap
lyes, pickles, etc., by dichromatic distillation
... Methods used to remove sodium chloride*

by B. S. VAN ZILE, E. W. BLANK and J. C. MOORE
Colgate, Palmolive-Peet Co., Jersey City, N. J.

INVESTIGATIONAL work instituted in this laboratory has established the fact that C. P. sodium chloride in quantities of 1/10 to 4 grams gives an apparent oxidizable content amounting to approximately 2/10 per cent when oxidized by potassium dichromate, according to the American Oil Chemists' Society standard method for the determination of glycerol in soap.¹ In addition, it was found that as the volume of concentrated sulfuric acid added in the determination was decreased or increased the per cent apparent oxidizable matter correspondingly suffered a decrease or increase. Finally, it was shown that as increasing amounts of C. P. glycerol were added to the same weight of the C. P. sodium chloride the per cent apparent oxidizable due to the sodium chloride (after subtracting the per cent oxidizable due to the glycerol) likewise increased.

As a result of the above experimental work it became apparent that to accurately determine the amount of glycerol in salt recovered from soap lyes, pickles, etc., by dichromate oxidation the sodium chloride must first be removed.

EXPERIMENTAL

Preliminary experiments with mixtures of C. P. sodium chloride and glycerol showed that extraction with acetone, 50/50 ethyl alcohol-ethyl ether mixture, and anhydrous alcohol resulted in recovery of approximately only 75 per cent of the glycerol added.

Efforts were next directed toward removing the

sodium chloride as hydrogen chloride gas by treating with concentrated sulfuric acid. It is an established fact that the presence of sulfates does not interfere in the dichromate oxidation of glycerol. The results obtained with concentrated sulfuric acid are shown in Table I.

Table I—Bichromate Oxidation of Sodium Chloride Before and After Decomposition with Concentrated Sulfuric Acid

Sample Grams	Direct Oxidation of C. P. NaCl % oxidizable as glycerol	Oxidation of C. P. NaCl after Decomposition with Concentrated H ₂ SO ₄ % oxidizable as glycerol
1.0 grams	0.18	0.05
" "	0.19	0.04
" "	0.20	0.03
" "	0.21	0.03
" "	0.23	0.03
" "	0.24	0.04
" "	0.23	0.03
" "	0.25	0.03
" "	0.16	0.05
" "	0.17	0.04
Average	0.21	Average 0.04

Table I presents the data obtained in 10 runs, using 1 gram of C. P. NaCl in each experiment. The average value for the per cent oxidizable as glycerol on direct oxidation was 0.21 per cent. The average value for the per cent oxidizable as glycerol after decomposing the NaCl with concentrated H₂SO₄ was 0.04 per cent.

The values obtained by oxidation of the salt after decomposition with sulfuric acid demonstrate that the average value of 0.21 per cent apparent oxidizable as glycerol in C. P. sodium chloride is incorrect and that the value is instead close to 0.04

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per cent. The next step was to add C. P. glycerol to C. P. sodium chloride and ascertain the recovery. The results obtained are given in Table II.

Table II—Recovery of Glycerol in Glycerol Salt Mixtures After Decomposition with Concentrated Sulfuric Acid

Oxidation of C. P. Glycerol + 4 Grams C. P. NaCl % oxidizable as glycerol	Oxidation of Same Amount of C. P. Glyc- erol in the Absence of C. P. NaCl % oxidizable as glycerol	Oxidation of Same Amount of C. P. Glyc- erol + 4 Gr. C. P. NaCl After H ₂ SO ₄ Decom- position % oxidizable as glycerol
1.33	0.85	0.83
1.31	0.85	0.89
0.61	0.30	0.34
0.60	0.30	0.32
0.41	0.16	0.18
0.40	0.16	0.18

The data given in Table II indicate that the method is accurate within experimental limits. Table III gives the results obtained on analysis of three different samples (A, B, C) of salt recovered from soap lye. As can be seen the results obtained for the glycerol content are considerably lower by the new method and presumably much closer to the actual value.

Table III—Bichromate Oxidation of Recovered Salt Before and After Decomposition with Concentrated Sulfuric Acid

Oxidation of Salt as Received % oxidizable as glycerol	Oxidation of Salt After Decomposition with H ₂ SO ₄ % oxidizable as glycerol	Difference % oxidizable as glycerol
A 0.74	0.47	—0.27
A 0.77	0.45	—0.32
B 0.68	0.41	—0.27
B 0.69	0.40	—0.29
C 1.20	0.81	—0.39
C 1.21	0.80	—0.41

The procedure by which the above results were obtained is given below. The method is general and applicable to any material consisting of large amounts of sodium chloride containing small percentages of glycerol.

PROCEDURE

Weigh approximately 50 grams \pm 1/10th gram of the sample and transfer to a 500 ml. volumetric flask. Partially fill the flask with water and shake until the sample is dissolved completely. Dilute the solution to a volume of 500 ml. by the further addition of water. Allow the solution to stand until any insoluble dirt that is present has settled out.

Pipette a 50 ml. aliquot of the clear solution into a 500 ml. tall type beaker and evaporate on the steam bath to a pasty consistency. This operation usually requires about two hours.

Slowly add 30 mls. of concentrated sulfuric acid to the sample, and allow to stand on the steam bath for about one hour after the frothing has completely subsided. The frothing usually ceases in about ten minutes. This operation should be carried out under a hood with a strong draft.

Remove the sample from the steam bath, cool, and proceed to oxidize or, if more convenient, allow to stand overnight at room temperature before

oxidizing. Proceed to oxidize by the method of the American Oil Chemists' Society¹ for the determination of glycerol in soap, bearing in mind that the sample already contains sufficient sulfuric acid for the oxidation.

Glycerin Recovery

ORDER M-193 sets up certain standards of production efficiency in glycerin recovery for the soap, fats splitting, and glycerin refining industries. The producer, as a condition to his being granted permission to saponify or hydrolyze any fat or oil in any process in which glycerin is produced, must not permit more than 1 per cent of glycerol to remain in the finished product, and must recover 92 per cent of the glycerol product of the spent lyes. In case of fat splitting, not less than 94 per cent shall be recovered. An exception is the manufacture of liquid, potash, cold-made and half-boiled soap, where not more than 2.75 per cent glycerol may remain in the product. A product covered by this exemption may use in any quarter not more than 90 per cent of his average quarterly consumption in the two-year period ending December 31, 1941. Refiners of crude glycerin are required to cover not less than 96 per cent of the glycerol content.

Because of certain technical conditions, exceptions to this order are made for persons consuming less than 10,000 pounds of fats, oil or fatty acids per month, because they represent a small part of the industry and because compliance would be technologically difficult. Likewise the order provides that WPB may specifically exempt certain plants where the glycerin recovery is considered to be at its maximum but lower than the standards set by the order. Manufacture of medicinal soap (U.S.P. XII) is also expected.

A refiner or manufacturer whose operations are covered by the order must file Form PD-712 with WPB by the 15th of each month. In this form he will state whether or not his production is complying with the standards of this order, and if he is not, he shall state the technical facts surrounding his operation.

Wherever constant compliance is not achieved, WPB technical experts will then investigate the process with a view to bringing the manufacturer up to desired efficiency levels.

The order became effective December 1.

Soap a Black-Out Aid

IN BRITAIN where enemy bombers can be guided to their objectives by light-colored roads which are visible from the air, bituminous emulsions made with soap are being considered to black-out these conspicuous surfaces. By painting a dilute bitumen emulsion on the roadway and dusting with pulverized coal, a cheap and durable blackening effect is obtained. (Brit. Pat. 534,889.)

¹ Official and Tentative Methods of The American Oil Chemists' Society, p. D-5 (1941).

Flavors

PRACTICAL SYRUP SUBSTITUTES

*Sugar shortage centers attention on artificial syrups
... Suspensions of tragacanth or Irish moss
sweetened with soluble saccharin most satisfactory**

by C. LEE HUYCK

Research Laboratories, William S. Merrell Co.

BECAUSE of the present restrictions on the use of sugar in pharmaceuticals and the possibility of greater restrictions in the future, the question of syrup substitution is an important one. It is hoped that this article may be of some value to workers confronted with this problem now and in the future.

In 1864 honey was suggested as a sugar substitute in syrup of ferrous iodide¹ not because of the lack of sugar but because it made a more stable syrup. T. B. Groves² added gums and honey to syrup of chloroform in order to increase its stability and viscosity. Guichard³ recommended glycerin as a substitute for sugar when a syrup was directed to be prepared from a drug extract. Molasses was suggested by F. Goldby⁴ as a syrup substitute during World War I for syrups of senna, rhubarb and poppy capsules. In suggesting saccharin as a sugar substitute, H. Helch⁵ found the amounts required to equal the sweetness of sugar syrups with the specific gravity of 1.30 and 1.33. C. P. Wimmer⁶ suggested two "War Emergency Formulas" for syrups to be used as substitutes for the official syrup of the United States Pharmacopœia. One contained glucose, saccharin and water, while the other contained crystal-white Karo, saccharin and water. E. O. Von Lippman⁷ pointed out that honey and molasses were used as syrup substitutes in the twelfth century. In view of the 20 per cent restriction on cane sugar in the last war, S. T. Hensel⁸ suggested a formula for a saccharin solution comparable to syrup in sweetness. The relative sweetening power of sugar substitutes was reported by the United States Department

of Agriculture⁹ to be as follows: sugar 100, honey (44° B.) 75, corn sugar 45, maltose syrup (42° B.) 30, corn syrup (45° B.) 20. W. A. Uglow¹⁰ found that Dulcin was dangerous for constant use as a sweetening agent. A concentrated sugar syrup containing cane sugar and invert sugar was recommended to the drug industry¹¹ as a substitute for the official syrup because of its high stability against molds and yeasts. Sionon (*d*-sorbitol) was recommended as a sugar substitute by H. Reinwein¹² but he pointed out that doses exceeding 70 Gm. cause diarrhea.

WORLD WAR I FORMULA USEFUL

Recently, the British Pharmaceutical Codex Committee¹³ has endeavored to find a suitable syrup substitute. A satisfactory substitute for all syrups was not found but the formula used in the last war has received the most attention. It has the following composition:

Tragacanth powder	2.5 Gm.
Alcohol, a sufficient quantity	
Chloroform	0.25 Gm.
Soluble Saccharin	0.25 Gm.
Distilled Water, <i>q. s.</i>	100 cc.

Several other gums were investigated because of the fluctuation in the availability of tragacanth and because tragacanth was not always found to be the most suitable. If no more than a 25 per cent reduction of sugar was wanted, the following formula was satisfactory:

Mucilage of acacia	25 cc.
Syrup, <i>q. s.</i>	100 cc.

* Journal of American Pharmaceutical Assn.

The following formulas were stable for four months:

I	
Gum tragacanth	2.0 Gm.
Glycerin, a sufficient quantity	
Nipagin M	0.1 Gm.
Soluble Saccharin	0.1 Gm.
Water, q. s.	100.0 cc.

II	
Karaya Gum	1.0 Gm.
Glycerin, a sufficient quantity	
Nipagin M	0.1 Gm.
Soluble Saccharin	0.1 Gm.
Water, q. s.	100 cc.

In these formulas, glycerin was used merely to form a cream and to increase miscibility. Another possibility is syrup of althea of the British Pharmacopœia Codex which contains 4 per cent of althea, 90 per cent of sucrose, 0.25 per cent of chloroform, and 56 per cent of distilled water. From syrup of althea, a good syrup substitute can be made by increasing the althea to 6 per cent and by replacing the sugar with 0.1 per cent soluble saccharin. In making syrup substitutes of the above types, the mucilages were brought to the boiling point and were allowed to digest for a half an hour before straining through flannel. None of the above syrup substitutes were found to be satisfactory for Par-
rish's or Easton's syrup.

C. H. Sykes¹⁴ stated that the following syrup substitute has been used by the London Hospital since April 1941:

P.M.B. #444 (May & Baker, Ltd.) ..	44 gr.
Chloroform	96 min.
Soluble Saccharin	56 gr.
Water, q. s.	1 gal.

The disadvantages of this formula were stated to be as follows: (1) The P.M.B. #444 (methyl cellulose) separated out in the form of a flocculent precipitate in the presence of a high concentration of alcohol or electrolyte; (2) syrups made by this formula were difficult to strain since the methyl cellulose blocked the openings of the straining cloth.

EXPERIMENTAL

A series of artificial syrups containing a water-soluble gum as thickening agent and sweetened with soluble saccharin were prepared about one year ago. They were flavored with artificial fruit essences and buffered to a pH of 4.8 with 1.3 per cent of citric acid and 4.4 per cent of sodium citrate. The high concentration of buffer salts was used in order to observe the effect of the addition of an electrolyte on the gum solution. As a preservative a combination of 0.02 per cent of Butoben and 0.1 per cent of benzoic acid was used. The thickening agents with amounts used were as follows:

- 8 per cent citrus pectin #100,
- 3.1 per cent Tylose (methyl cellulose),
- 2 per cent extra high viscosity Methocel (methyl cellulose),
- 2 per cent Gelloid (Irish moss),
- 18 per cent acacia,
- 1½ per cent tragacanth,

- 1 per cent locust bean gum,
- 1.5 per cent Iscoalginate (purified alginate),
- 3 per cent Orbalgin (purified alginate),
- 3 per cent apple pectin #210,
- 3 per cent Kelgin (sodium alginate),
- 8 per cent apple pectin #100,
- 3 per cent karaya gum,

A combination of 50 per cent glycerin and 20 per cent sorbitol.

Syrups containing Tylose, Methocel and acacia were unsatisfactory directly after preparation. The syrups containing the Orbalgin, apple pectin #210, citrus pectin #100, apple pectin #100, karaya gum, Iscoalginate and the combination of 20 per cent sorbitol and 50 per cent glycerin contained sediments after one month's storage at room temperature. The syrup containing Gelloid showed a few coarse particles in suspension after one year at room temperature, but it was considered satisfactory. The syrups containing Kelgin, tragacanth and the locust bean gum were of satisfactory stability after storing for one year at room temperature.

Since the syrup containing the Kelgin was quite viscous, 2 per cent would probably be more satisfactory than the 3 per cent used in the above experiment. It is interesting to note that a syrup containing 3 per cent apple pectin #210 adjusted to a pH of 5.2 jellied after six months while a similar syrup adjusted to a pH of 3.9 had only a small amount of sediment after thirteen months' storage at room temperature.

SUMMARY

1. Artificial syrups of satisfactory stability prepared with sodium alginate, Irish moss, tragacanth and locust bean gum as thickening agents and soluble saccharin as sweetening agent have been prepared.

2. Syrup substitutes containing two grades of methyl cellulose namely Tylose and Methocel were found to be unsatisfactory. These results are in agreement with the results of C. H. Sykes.¹⁴

3. Because of the uncertainty of the supply of tragacanth and locust bean gum during the present world conflict, domestic sodium alginate and Irish moss will probably receive more attention in the future.

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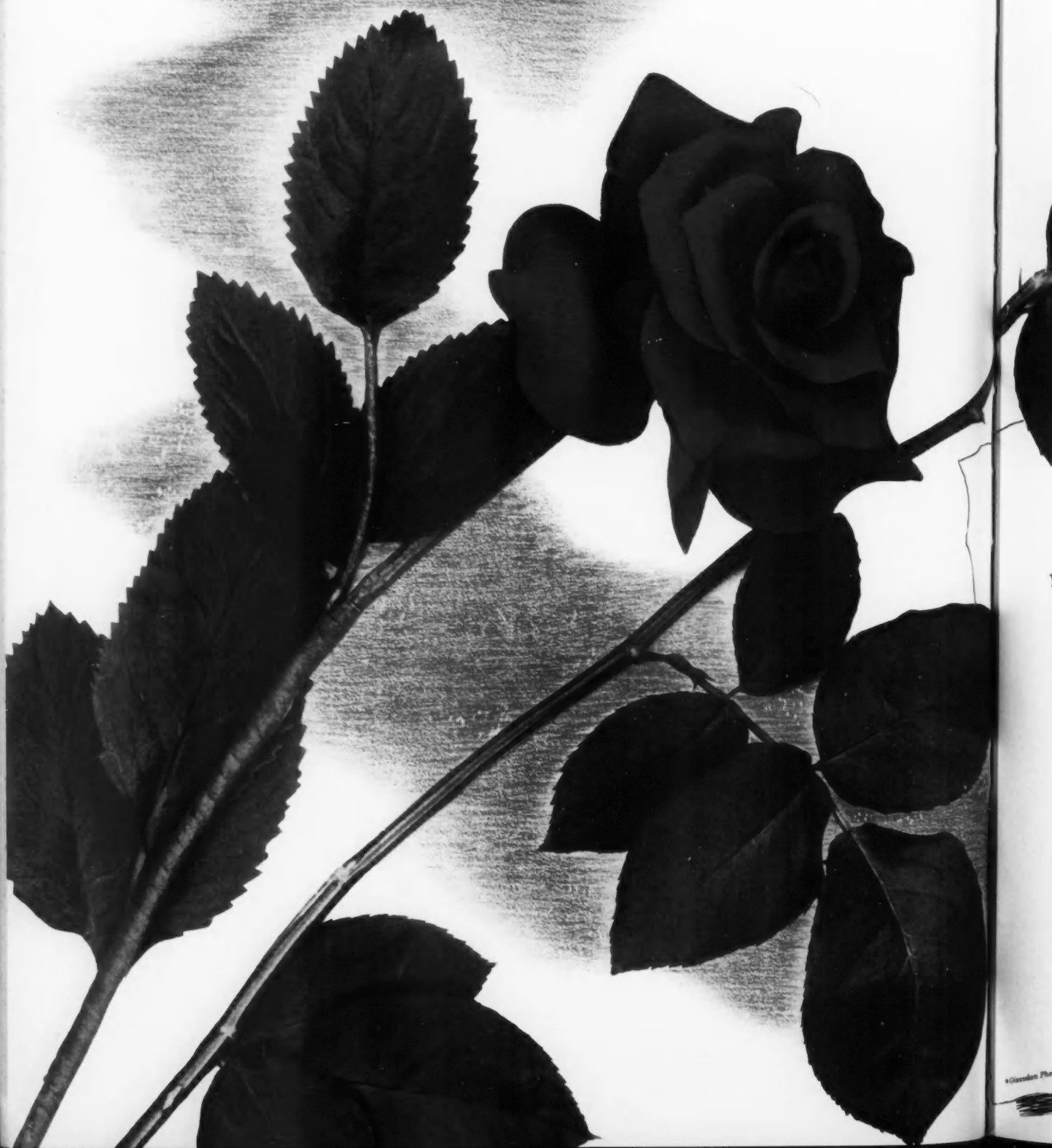
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Aromatic Chemicals - Essential Oils

Vanilla Extract Ceilings

QUESTIONNAIRES have been sent to manufacturers of vanilla extract and flavors by the OPA for the purpose of obtaining necessary information on which to establish ceiling prices on such products. The Flavoring Extract Manufacturers Assn. and the Grocery Manufacturers of America, Inc., are co-operating in getting the needed information from manufacturers.

Brand Preferences

THE COMPARATIVE popularity of various brands of flavored gelatine and soft drinks throughout the nation is indicated by the seventh Survey of Homemaking just published by *Modern Magazines*.

The tabulated results are as follows:

Flavored Gelatine		Soft Drinks	
Jell-O	72.4%	Coca-Cola	43.3%
Royal	15.5%	Pepsi-Cola	21.6%
Knox	3.8%	Nehi's Cola	6.1%
A & P brands	3.3%	Canada Dry	2.2%
Jell Well	1.0%	Hire's Root Beer	1.8%
All others	4.0%	Dr. Pepper	0.9%
		All others	22.4%

Dehydrated Soup

JOSEPH TETLEY & CO., New York, N. Y., is launching a new dehydrated soup mix and the Quaker Oats Co., Chicago, Ill., is introducing Aunt Jemina's ready-mix soup, a dehydrated product, in Canada.

New Coffee Extender

TROXA, a coffee extender has been launched by the Jewel Tea Co., Barrington, Ill. It is a chicory blend offered in two types. The first is native American chicory, caramel and rye. The second has imported elements, chick peas and garbazo from Mexico plus grain and caramel. The impending shortage of chicory, a root grown in Michigan chiefly, is responsible for the second blend. Troxa is sold separately, not blended into the coffee. Half as much Troxa as coffee is blended to give "twice as much coffee." The product itself makes a smooth beverage but it is better with coffee. Sales are reported to be excellent.

Apple Syrup

THE TOBACCO industry, large users of glycerine and syrups for their humectant, or moisture-stabilizing properties, are being urged by U. S. Senator Harry F. Byrd to look to apple syrup for the required functions. The properties of apple syrup are comprehensively described by the Eastern Regional Research Laboratory of the U. S. Department of Agriculture at Philadelphia, based on the new product which they have recently perfected.

Senator Byrd said that he had been in touch with a number of cigarette and tobacco manufacturers

and that the industry seemed to be interested in the syrup as a substitute for glycerine, now that the supplies of the latter have been curtailed.

P. S. Senator Byrd is a large apple grower.—*Food Materials & Equipment*.

F.E.M.A. Meeting

INSTEAD of holding the annual convention of the Flavoring Extract Manufacturers' Assn. in Chicago, where it normally would be held, it is likely that the meeting will be held in New York, N. Y. While definite plans have not as yet been announced this is the opinion of prominent officers and manufacturers who feel that this is the wisest solution in view of the war. Time and transportation for a greater number will be conserved by holding the meeting in New York. It is also likely to be a very important meeting, with strict attention to business.

Lemon Flavor with Mineral Oil

THE TENTATIVE specification issued by the Quartermaster Corps of the War Department for non-alcoholic lemon flavoring uses mineral oil as the vehicle for the lemon oil. The specifications call for: C. *Material and Workmanship*.

C-1. Lemon flavoring, nonalcoholic, shall be prepared in accordance with best commercial practice, and shall be made under modern sanitary conditions from clean, sound materials which produce a flavor and aroma of desirable quality for food purposes. D. *General Requirements*.

D-1. All ingredients shall be of a degree of purity which would conform to the provisions of the Federal Food, Drug and Cosmetic Act.

D-2. Enough certified oil-soluble food color may be incorporated into the flavor to impart a normal lemon extract shade.

E. *Detail Requirements*.

E-1. Lemon flavoring, nonalcoholic, shall be a mixture of 5 per cent, by volume, of lemon oil, and 95 per cent, by volume, of mineral oil.

E-2. The lemon oil shall be the cold-pressed essential oil of lemon of high commercial grade.

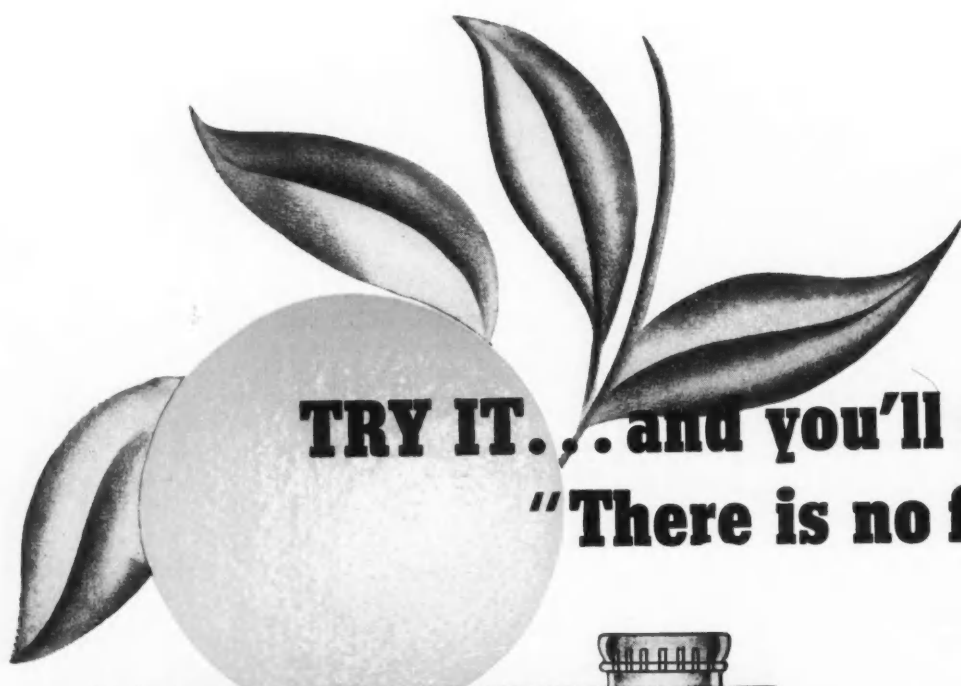
E-3. The mineral oil shall be that classified as Light White Mineral Oil, U.S.P.

E-4. The mineral oil shall have a viscosity range of 80-90 seconds as determined with the Saybolt Universal Viscosimeter at 100° F.

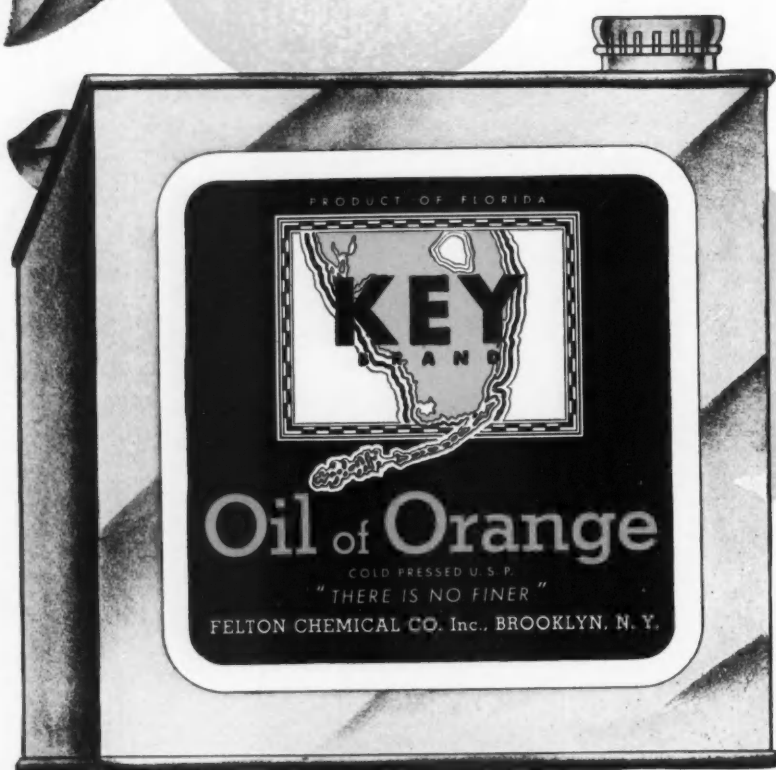
E-5. The mineral oil shall remain stable after having been subjected to a temperature of 300° F. for a period of 20 minutes.—*Food Materials & Equipment*.

Suggesting Retail Prices

MANUFACTURERS are cautioned by OPA against suggesting retail prices even under fair trade contracts without putting retailers on notice that the suggested price may be charged only if it does not exceed the retailers' maximum price under OPA regulations. If not done, the manufacturer is a violator.



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New Products and Processes

Imitation chocolate flavor

An imitation chocolate flavor, designated as G-6, is now offered by P. R. Dreyer, Inc., New York, N. Y., according to C. Lloyd Fischbeck, manager of the flavor division. This liquid product has been developed to supplement cocoa in flavor, in chocolate products. Imitation chocolate flavor G-6 was developed entirely for its flavor qualities and not for any food value it may possess. The company suggests that this imitation flavor be used in the following manner: Sixty per cent natural cocoa powder, 5 per cent imitation chocolate flavor G-6, and 35 per cent cerulose or other filler. Used in this manner, P. R. Dreyer, Inc., claims that this will give the relative flavor strength of cocoa.

Imitation perfume oils

War time scarcity of some true oils has lead Standard Synthetics, Inc., New York, N. Y., to develop a number of imitation products including the following: imitation oil cassia, imitation oil bergamot, imitation oil cinnamon, imitation citronella Java, imitation geranium, imitation lavender, imitation lemongrass, imitation peppermint and imitation sassafras. Further information on these products may be had from the company.

Pay calculator

A specialized type of slide rule of lacquered wood with legible figures known as a payroll and job calculator is offered by the Berger & Bricker Co. Rates of pay within its compass range from fifty cents to \$1.75 per hour in increments of one-half cent. Time periods range from 0 to 104 hours. The slide is set and the result is copied.

Odorless deodorant

An odorless deodorant, known as formula O. D. 30, is announced by Associated Chemists. The new product differs from those products on the market which eliminate odors by substitution or camouflaging one odor with another in that O. D. 30 destroys odors by a process of oxidation, according to the makers. It was invented by Dr. James F. Dalbey; and one of his associates in its development is Dr. Walter H. Eddy, well known in the allied trades. The product contains a small amount of permanganate of potassium, two catalysts, carbonate of soda, boric powder and several other ingredients. Its activation as an odor destroyer is said to

depend on a catalyst which is the discovery of the inventor. A small amount of formula O. D. 30, odorless deodorant, is dissolved in water which may be sprayed or sprinkled or vaporized by heat to remove objectionable odors. Further details about its uses, etc., may be had for the asking.

Cork from fir

High grade cork from the bark of Douglas fir trees of the Pacific northwest according to Dean Hugo Windenwerder of the College of Forestry, University of Washington, may be produced in sufficient quantities to meet the needs of commercial as well as army uses. According to Prof. B. L. Grondal, who has been conducting experiments for over a year, deep cork formation occurs at a relatively early age in the life of the tree. Four grades have been discovered. It is not yet in commercial production.

New fire extinguishers

A new fire and war gas extinguisher which is claimed to be effective as a decontaminator for the three major war gases is offered by the O. H. Adams Co. One cubic inch of the new fire extinguisher upon contact with fire has produced over 1000 cubic inches of fire-smothering gases. It is claimed to be effective in combating household and factory fires of all types, and it is stated that the product is non-injurious and lasts indefinitely.

Agitated wood tanks

A line of agitated wood tanks made from cypress, redwood, long leaf yellow pine, fir, oak and poplar, equipped with Porter agitators, is announced by the H. K. Porter Co. as an aid to the process industries during the war. Wood



New Wood Tank with Agitator

tanks for the storage of water, oil, chemicals and various solutions are available in numerous sizes and shapes up to 100,000 gal. capacity.

Air motors

Gast rotary air motors offered by the Gast Mfg. Co. are designed to deliver from 1/20 to 1 horsepower in locations where explosion proof equipment is essential, or where by reason of the copper shortage plants are unable to extend wire facilities for electric motors.

Announcements

U. S. manual

Organization functions and activities of the federal departments and agencies are outlined in the fall edition of the U. S. Government manual just issued. The new edition, containing 700 pages, includes statements on all branches of the government, list of principal officials, emergency war agencies and other pertinent information regarding governmental activities. Single copies may be obtained for \$1 each from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Food and drug bulletin

Bulletin No. 67 issued by the State Laboratories Dept., Bismarck, N. D., has been published. It contains 190 pages and includes analysis and registration of beverages, food and other products.

Service regulations

The OPA is distributing Manual No. 2 explaining how the Service Trades Price Regulation applies to more than 600,000 service establishments throughout the country.

Plastic parts for war production

Companies confronted with material shortages and delayed deliveries are invited by Creative Plastics Corp. to write for a copy of "Plastic Parts for War Production." According to the concern, any fabricating techniques developed by engineers will help you solve difficult production problems without delays and high costs of molds.

Technical books

The new 1942-43 catalogue of technical books containing 64 pages, issued by the Chemical Publishing Co., Inc., is available to anyone who cares to write for it. Included in the catalogue are the Spanish and Portuguese books of Editorial Tecnica Unida, the Spanish subsidiary of the company.



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AMONG OUR FRIENDS

► Vice-President Henry A. Wallace will be the guest speaker at the 32d annual banquet of the National Retail Dry Goods Assn. in the Hotel Pennsylvania, New York, N. Y., January 14.

► Talmadge B. Tribble, vice-president of Magnus, Mabey & Reynard, Inc., in charge of the Chicago territory, has increased the business of the branch 600 per cent since he assumed charge four years ago, according to a statement of Percy C. Magnus, president of the company, who recently visited the branch. For four successive years the Chicago offices and warehouses have been enlarged to facilitate the handling of the increased volume of business in the midwest. The latest increased the floor space 50 per cent.



Talmadge B. Tribble

► Waldron C. Anderson, who has been associated with Richard M. Krause, Inc., New York, N. Y., for the past four and a half years, has been appointed controller of the company. Prior to joining the Krause organization he was an accountant for the Mt. Vernon Trust Co.

► Charles Fischbeck, vice-president P. R. Dreyer, Inc., New York, N. Y., is recovering from a broken ankle suffered when he was stepping off a ferry boat in New York. His right ankle was twisted, causing one bone to be broken.

► Iver T. Lindquist, controller of Allied Products, Inc., New York, N. Y., has been elected a member of the Controllers' Institute of America, a technical and professional organization of controllers devoted to the improvement of controllership procedure.

► Dr. Alexander Katz, chief chemist for Florasynth Laboratories, Inc., in Los Angeles, Calif., and F. O. Daiker, specialty man for the firm, have completed a Pacific Northwest plane trip.

► Dr. Doane Hage, of the New York office of the Arthur Colton Co., reports that his son, Sergeant Doane Hage, Jr., has been reported missing in action by the War Dept. Sergeant Hage was aerial gunner connected with the 423 Bomb Squadron, U. S. Army Air Corps, located in England. The action took place in the western European area

Nov. 9. Prior to Sergeant Hage's enlistment in the army last February he was a cadet at the Virginia Polytechnic Institute. His parents have strong faith that he may have been forced down in enemy territory and may yet be safe as a prisoner or possibly have been picked up by some boat.

► Jean Faverjon, general manager of Payan & Bertrand, S.A., of Grasse, France, has gotten word through to Gerard Danco, of Gerard Danco, Inc., New York, N. Y., American representatives of the organization, that in spite of difficulties, operations are continuing and that he is in good health. Mr. Faverjon wanted to be remembered to his friends here and is looking forward to seeing them again.

► Dr. T. C. Smith, a chemist for six years past of the Florasynth Laboratories, Inc., Los Angeles, Calif., has been commissioned a first lieutenant in the Chemical Warfare Service. He is, at present, attached to the Procurement Division of the Huntsville Arsenal in Alabama. Prior to joining the Florasynth Laboratories, Dr. Smith was with a



Dr. T. C. Smith

leading cosmetic concern in Los Angeles. He devoted a portion of his time, while with the Florasynth organization, to lecturing as an instructor in advanced chemistry at the University of Southern California. Herbert Kap-



Missing in action—Sergeant Doane Hage, Jr.

low, also of the Los Angeles office of the Florasynth company, and assistant to Dr. Smith, has entered the Chemical Warfare Service and is stationed at Gadsen, Ala.

► William R. House has been appointed branch manager of the Buffalo, N. Y., sales office of Owens-Illinois Glass Co.

► Jacques L. Ach, secretary of Glass Industries, Inc., New York, N. Y., has been granted a commission as a first lieutenant in the U. S. Army. Lieut. Ach, after the completion of several months training, is now stationed in Washington. Lieut. Ach is an attorney and a certified public accountant and resides in Cincinnati, Ohio, where Glass Industries



Jacques L. Ach

also has an office. Here he practiced his profession as well as serving with his company. His duties with Glass Industries have been taken over by his brother, E. L. Ach, treasurer of the organization. Active management of the company continues under the direction of George Grunberg, president, in the New York headquarters.

► Robert Senior, son of the late Charles Senior who for many years was an official of Florasynth Laboratories, Inc., New York, N. Y., has been promoted to the rank of master sergeant in the United States Army. Sergeant Senior originally enlisted in the 7th Regiment, New York, and after intensive training, received a rating as machine gun corporal. He was assigned to duty aboard vessels conveying vital materials to American bases abroad. After one month aboard ship, he was made gun captain, and the following month, first sergeant in charge of his detachment. He subsequently received his warrant as master sergeant. Before U. S. entry into the war, Sgt. Senior was with the sales department of the Florasynth organization.

► A. D. Shoup, Jr., vice-president of Shoup-Owens, Inc., Hoboken, N. J., who recently joined the American Field Service, will sail shortly for Africa.

► Glen Haskell, of the U. S. Industrial Alcohol Co., New York, N. Y., and Leland I. Doan, of the Dow Chemical Co., Midland, Mich., are members of the ethylene dichloride industry advisory committee recently announced by the War Production Board.

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Temperature control

The line of Universal controllers, manufactured by Wheelco Instruments Co., for temperature control applications is given in Vol. 2, No. 2 of *Wheelco Comments*. Pyrometers, potentiometers and thermometers with unit construction features to permit ready removal of each component for inspection, repair and replacement are adequately described.

Books to Aid You

PERFUMES, COSMETICS & SOAPS. *William A. Poucher, Ph.C. Volume I, a dictionary of raw materials with an account of the nomenclature of synthetics, 459 pages, 5½x8¾ in., Fifth edition, 1942. Price, \$8.00. Volume II, a treatise on the production, manufacture and application of perfumes of all types, 430 pages, 5½x8¾ in., Sixth edition, 1942. Price, \$8.00. Volume III, a treatise on Modern Cosmetics, 234 pages, 5½x8¾ in., Sixth edition, 1942. Price, \$7.00. Cloth covers, all volumes illustrated. D. Van Nostrand Co.*

Since the last edition of Volume I much research has been given to cosmetic chemicals of which the author cites 23 new substances in this volume. Notes on eight new volatile oils are included. A concise account of bergamot and lemon oils should do much to clear up obscure points about them. As in previous editions each material is listed in alphabetical order and the data are brought fully up to date. In view of the scarcity of certain perfumery raw materials due to the war, greater ingenuity is called for on the part of chemists who must find substitutes; and this volume should be of much help in the solution of such problems. Four appendices cover the nomenclature of synthetics, determination of physical constants, conversion table and data and standard packages.

The more important results of the extensive research that has been devoted to the constitution of some of the flower oils are included in Volume II in the respective flower monographs. In the light of this research formulae have been adjusted wherever necessary. Chapter headings are: Historical Sketch; Production of Natural Perfumes; Purchase and Use of Flower Absolutes; Odor Classification; Fixation and Blending; Monographs on Flower Perfumes; Miscellaneous Fancy Perfumes; Toilet Waters; Soap Perfumery; Tobacco Flavors; Floral Cachous; Incense and Fumigants; Sachets and Solid Perfumes; and Fruit Flavors.

A considerable amount of new matter is included in Volume III, particu-

larly on bath oils, foam baths, brilliantine cream, hair lacquers, greaseless hair creams, a new type of hair dye, lipstick colors, mascara, eye lotions, deodorant sticks, complexion milk and powder sticks. The author stresses the importance of simplicity of formulae in all experiments for the reason that a few well chosen raw materials properly combined will give a more elegant and stable product. Wise chemists, he points out, give their experiments long shelf tests with frequent observation before finally approving a new formula. Useful formulae are given for each product described. Chapter headings are: Bath Preparations; Dental Preparations; Hair Preparations; Hair Dyes; Lipsticks; Manicure Preparations; Rouge and Eye Cosmetics; Shaving Preparations; Skin Creams and Lotions; Smelling Salts; Sunburn Preparations; Theatrical Requisites; Toilet Powders; and an appendix with numerous tables of weights and measures and conversion tables.

In the completely revised edition of the three volumes comprising this work the author has produced the simplest, the clearest, the most up to date and probably the most authoritative combined work on soaps, perfumery and cosmetics that has appeared in the English language in recent years.

ELECTROPHORESIS OF PROTEINS AND THE CHEMISTRY OF CELL SURFACES. *Harold A. Abramson, Laurence S. Moyer and Manuel H. Gorin. 6¼x9¼ in., 341 pages. Reinhold Publishing Corp. 1942. Price \$6.*

This work is designed to aid the investigation of the surface chemistry of living cells. All phases of the subject are presented in as nearly a complete form as possible. The correlation of the behavior of proteins in solution, adsorbed at surfaces and oriented at the limits of crystal lattices, blood cells, latex, the skin, etc., should lead to a much better understanding of the way proteins behave in living cells. To fit the needs of investigators in diverse fields such as biology, chemistry, medicine and physics the theoretical discussion is divided into a general and a special treatment.

Chapter headings are: General Principles of Electric Migration in Liquids, Experiments in the Nineteenth Century, Methods, Dissolved and Adsorbed Proteins and Related Surfaces, Electrokinetic Theory and Migration of Charged Particles, Electric Mobility and the Calculation of the Net Charge, Serum and Plasma, Antibodies, Antigens and Their Reactions, Interactions of Proteins in Mixtures, Interactions of Proteins at Surfaces, Enzymes and Hormones, Miscellaneous

Electrophoretic Investigations of Biological Interest, Latex and Surface Chemistry of Cells.

BREAKING THE SKILLED LABOR BOTTLE-NECK. *Eugene J. Bengel. 8x10¼ in., 48 pages, 13 illustrations and charts, cloth covers. National Foremen's Institute, 1942. Price \$2.00.*

This highly practical manual has been written from experience. It shows how to subdivide labor skills to gain maximum production; and in these times particularly it should be of great help to foremen, supervisors, job setters and vocational instructors. The book is the result of study of the many ways in which labor shortage may be avoided or overcome. Subdivision of skill, coupled with intensive training—the subject of the manual—proved to be the most promising method for showing immediate results.

Following an actual case history the author, who writes tersely and with marked clarity, analyzes the nature of skill. Subsequently, he points out four ways of overcoming shortages: selection, training, motivation and supervision, adequately developing each. The appendix gives useful data on the time taken to learn jobs. The manual is useful to plants engaged in war work.

HOW TO TRAIN SALESPeople. *A new series of 15 booklets giving a complete course in the training of salespeople for department stores and other retail establishments. Each booklet contains about 36 pages and is bound in heavy paper. The set is enclosed in a durable slip case that readily fits into a book case. American Technical Society, 1942. Price, \$6.00.*

This timely series of booklets is extremely practical particularly in these times when there is a large labor turnover and training is so necessary. The author is teacher trainer in the department of Distributive Education, Indiana University; and this series is the result of his vast experience in conducting training classes for store training executives in all parts of the country. It is especially valuable to retail store executives who are responsible for the efficient training of their salespeople. The series may also be readily studied at home. The complete course consists of 15 texts as follows: Selling Teaching; Who Benefits?; It's Part of My Job; This New Task; Plan Before You Start; What Should be Taught an Employee?; Your New Tools; Watch How I Do It; I Will Tell Them Now; Your Blueprint; Let's Pool Our Experience; Let's Sit Down and Work Out a Solution; Are You in Tune with Training?; What! Me a Teacher?; and The First Meeting.

NEWS FROM WASHINGTON

by ARNOLD KRUCKMAN, *Washington Correspondent*

New order restricts alcohol to 50% effective December 2

The alcohol order, further restricting use in cosmetics, toiletries, shoe polish, candy glazes and deodorant sprays (non-body), to 50 per cent, became effective on December 2. The long-expected cut was hastened by the campaign in North Africa and by the hectic



Fred J. Stock, chief, Drug and Cosmetics Section of the Chemicals Division of the Commodities Bureau, War Production Board

expansion in the rubber program. It is curious that moans heard by Alcohol Administrator Frank Bennett, of the Chemicals Division, on one side predict the utter annihilation of the industry, and on the other there was rejoicing that the cut was no deeper. If you are inclined to gripe about it, think this one over: it was firmly set for a cut to 45 per cent even as late as the last days in November.

The amended order with the drastic reduction was to be made effective retroactively as of November 15. But in the whirlwind of conferences that ended on December 1, the judgment and counsel of your friends in the division prevailed. And you may depend upon it, they are your friends.

Alcohol a critical material badly needed in war effort

Your industry does not know, but there are elements in it that have managed to smudge your reputation here so that some people question the essential

patriotism of your industry. The elements in mind came here and played politics all over the place to secure a better allocation than 50 per cent. That is normal and not particularly open to criticism. But they went beyond the division itself, in the face of the fact that it was demonstrated that alcohol is one of the most critical materials in the offensive campaign our forces are now developing all over the globe. You may appreciate the fact that a non-essential industry which tries to justify the use of something badly needed for the war on the fighting fronts, must have an absolutely airtight alibi. Playing politics doesn't produce one.

Indicate restrictions will be eased if more alcohol available

At the same time there is plenty sympathy for the needs of the industry. There are people here in Washington who hold that you are entitled to more alcohol, *when that alcohol is available over and above the needs for making ammunition and making rubber.* Dr. Walter G. Whitman, assistant chief, Chemicals Division, WPB, has stated new plants are to be constructed soon, to produce industrial alcohol. Others say there are definite indications there may be more alcohol if pending actions develop according to program. Apparently it would be wisdom to let these people in the Chemicals Division alone, at least until February or thereabouts. By that time you will be able to see clearly what you can do. If the signs are read properly, that may be the time to appeal for some modification of the present restrictions. Do not expect another miracle like the revocation of the toiletries-cosmetic limitation order, although miracles may still happen, but be content with reasonable relaxation. It may happen. Meanwhile, take a tip and obey the present alcohol order.

Law has teeth in it for users of too much alcohol

You have already heard about that firm in the middlewest which has been fined 150 per cent withholding of its

ordinary supplies because it thought it could put over misuse of its inventory. Administrator Bennett has a rather effective crowd of undercover reporters who tell the Chemicals Division about those who use too much alcohol, or who do not use the alcohol within the limitations of the law. The law gives the Chemicals Division the right to prosecute offenders in the



Lawrence Brown is assistant chief of the Chemicals Division of the Commodities Bureau of the War Production Board

courts and to secure their conviction, with heavy fines and jail sentences. But the Chemicals Division, plus Mr. Bennett, is wiser. They punish by invoking the rationing powers of the WPB, and by enlisting the assistance of the Bureau of Internal Revenue. When and if a recalcitrant member of the industry gets too offensive in his violations he may find himself absolutely shorn, for the duration, of the right to obtain ANY alcohol. Obviously that means the offender goes out of business while the war continues.

Flavor companies not affected by the order

The recent alcohol order does not affect the beverage and flavor people. They are still able to secure 100 per cent of the supply they require. The Chemicals Division is genuinely earnest in its desire that all the users of alcohol shall have the fullest possible supply. It has been making technological studies and recently its engineering staff announced

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★ 1942

Improved Synthetic Camphor Yield Seen With New Procedure

Ethanol Treatment of Bornyl Chloride Residues May Be Key

WEEKS, La.—What may be the key to higher yields of synthetic camphor is suggested in a recent patent granted to two inventors here.

The patent deals with a new technique for increasing the yield of bornyl chloride, and since this compound is an important intermediate in the production of synthetic camphor, the process described may be expected to have beneficial results in increasing the output of the latter material also.

Preparation of Bornyl Chloride

Bornyl chloride, the inventors point out, is prepared by saturating pinene with dry hydrogen chloride. An oily mixture is formed, from which the bornyl chloride is separated by crystallization. It has now been found, however, that substantial amounts of the bornyl chloride are not removed by the crystallization, and remain in the residue.

This additional material, the inventors claim, can be recovered by selective dehydro-

(Continued on next page)

Ether Called Best Wartime Anesthetic Of Inhalation Type

Among the existing anesthetics of the inhalation type, ether has definite advantages for use in combat areas, it has recently been reported. Factors contributing to the suitability of ether for wartime inhalation anesthesia include the ease with which it can be transported in small cans; the possibility of storing it for indefinite periods; ease and safety of administration by the open drop method; and the relatively lower danger of explosion as compared with other commonly used inhalation anesthetics.



Ease and safety of administration of ether are among the reasons why it has been characterized as the best anesthetic of the inhalation type for use in combat areas.

Offer Ointment Formula For Mustard Gas Burns

WASHINGTON, D. C.—An ointment suggested by the Office of Civilian Defense to relieve the pain and itching of mustard gas burns has the following proportions:

	Parts
Benzyl alcohol	50
Stearic acid	30
Glycerin	10
Ethyl alcohol	8
Pontocaine	1
Menthol	1

Copal Resins Dissolved By Aid of Nascent Oxygen

SUNDBYBERG, Sweden—Difficultly soluble fossil resins, particularly such members of the copal group as Zanzibar, Mozambique, and Congo resins, can be easily dissolved without previous melting by subjecting them to the action of nascent oxygen in the presence of an inert solvent.

This discovery has been made by an inventor here, who has received a U. S. patent on the method. In a typical procedure, the resin is finely divided and mixed with a small amount of manganese peroxide or vanadic acid, acting as a catalytic agent. Over the mixture is poured a suitable solvent: for example, ethanol, or a mixture of 50% ethanol, 40% benzol, and 10% acetone.

A mixture of hydrogen peroxide and nitric acid is then added. Nascent oxygen is released from the hydrogen peroxide, and reacts on the particles of the resin, which quickly dissolve in the solvent, it is claimed.

Say Tincture Preparation Time May Be Shortened

Possibility that the time for preparing tinctures of alkaloids may be shortened is suggested by the work of foreign investigators. According to reports of this work, a tincture of cinchona was first prepared by 10-day maceration with dilute alcohol. This tincture assayed 1.25% alkaloids. It was found that maceration with shaking, using 70% alcohol, yielded a tincture equal in potency to that prepared by the 10-day maceration.

This suggests that by a procedure of shaking and maceration, tincture of cinchona can be prepared in small quantities in a short period of time. It has not yet been determined whether the technique can be applied with equal success to other tinctures.

Describes Novel Method of Testing Greaseproof Paper

APPLETON, Wis.—A titanium pigment dispersed in ethanol plays a part in a new method for evaluating greaseproof paper, according to a patent issued to two inventors here.

The pigment is applied to one side of the paper and an oil dye to the other. If any of the oil dye penetrates the sheet, it will be absorbed into the pigment coating, producing a stain. The effectiveness of the greaseproofing is determined by comparing the appearance of the test sample, after a definite time, with a standard sample.

Lists Many Esters Helpful in Abating Foaming of Casein

Recent Research Throws Further Light on Most Effective Agents

NEWTON, Mass.—A new insight into ways of preventing foaming of casein paints and other protein compositions has been given as a result of research outlined in a patent recently granted to an inventor here.

According to the inventor's theory, foam formation and prevention in protein compositions are related to the action taking place at the interface between the protein composition, the air phase, and the film of anti-foaming material. It is suggested that the formation of the foam results from an increased concentration of the protein material at the interface. The surface tension of the water is thus lowered sufficiently to allow the formation of bubbles of foam.

Effect of Anti-foaming Agents

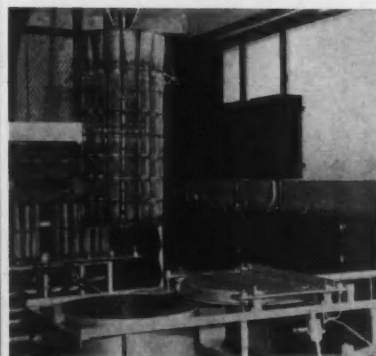
If an anti-foaming agent is present in an amount greater than is needed to saturate the protein film, the protein, according to this

(Continued on next page)

Alcohol Quench Prevents Aluminum Alloy Rivets From Sticking Together

Aluminum alloy rivets used in aircraft construction by The Glenn L. Martin Company are prevented from sticking together by immersing them in an alcohol quench tank.

The rivets are of the type which, immediately after heat treatment, are placed in refrigerated storage to keep them soft and workable until they are to be used. (U.S.I. CHEMICAL NEWS, September, 1941.) At the conclusion of the heat treatment, the rivets are first quenched in water, and then in alcohol at 0° F. or less. The alcohol quench aids in preventing the rivets from freezing together when they are later placed in cold storage.



Quench basket containing rivets is lowered into alcohol quench tank, which helps to prevent them from sticking together.

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1942

Solvent Blend Addition Helps Prevent Clogging Of Oil Burning Systems

CHICAGO, Ill. — The clogging and fouling of domestic and commercial fuel oil burners can be prevented to a large extent by the addition of small amounts of a suitable solvent blend to the fuel oil.

This discovery is outlined in a recently issued patent assigned to a manufacturer here. In general terms, the solvent blend consists of: a compound boiling over 350° F. and having excellent gum solvent properties at elevated temperatures; and a compound boiling below 350° F. and having good gum solvent properties at ordinary temperatures.

A particularly effective solvent blend, it is indicated by the patent, consists of dibutyl phthalate and ethyl acetate. It is claimed that the addition of such a blend is helpful not only in preventing fouling of the oil burning system, but also in removing existing gummy deposits.

Dibutyl phthalate and ethyl acetate are produced by U.S.I.

Dibutyl Phthalate Nearest To Universal Plasticizer

Dibutyl phthalate represents the nearest approach to a universal plasticizer for grinding pigment pastes to be added to lacquers, it was suggested in a recently conducted question-and-answer forum on paint problems. The dibutyl phthalate absorption of pigments is approximately twice that of raw linseed oil.

Dibutyl phthalate is particularly suitable for grinding pigments for addition to nitro-cellulose lacquers. For cellulose acetobutyrate lacquers, it is suggested that a mixture of dibutyl and dimethyl phthalates should prove most satisfactory.

Synthetic Camphor Yield

(Continued from preceding page)

chlorination of the residue in the presence of 95% ethanol. The ethanol serves as a common solvent for the components of the residue and for the dehydrochlorinating reagent.

The treatment, it is said, does not affect the bornyl chloride, but the other components of the residue become dehydrochlorinated, and can be separated from the bornyl chloride by distillation.

Recovery is reported to be as high as 25 to 35% by weight of the residue.

Revised Specifications For Road-Marking Paints

WASHINGTON, D. C. — New specifications have been issued for road-marking paints, to conform with regulations permitting the use of limited amounts of Batu and Congo Copal gums in paints of this character.

Under present regulations, up to one pound of Batu or two pounds of Congo can be used per gallon of road-marking paint. The revised specifications take into account this easing of restrictions on the use of natural resins.

U.S.I. will refer readers to a source from which the new specifications can be obtained.

Foam-Abating Agents

(Continued from preceding page)

theory, is either precipitated out of the solution, or is reduced in concentration so that it no longer lowers the surface tension of the water. Consequently, foam formation is abated.

It is obvious that the application of this theory to foam prevention requires the use of an agent exceeding that necessary to saturate the solution. This result can be obtained, the inventor claims, by means of esters which are soluble to only a limited extent in water, and which have a higher boiling point. When these esters are added to the protein compositions in amounts exceeding their solubility in water, at least a molecular layer of undissolved ester is always present between the surface of the protein solution and the adjacent surface of the air layer.

Suitable Esters

In this way, a permanent anti-foaming effect can be produced, according to the inventor. The patent lists a considerable number of esters which meet the necessary requirements. Among the U.S.I. products included in the list are:

Amyl acetate
Butyl acetate
Butyl ethanedioate
Dibutyl phthalate
Diethyl carbonate
Diethyl phthalate
Ethyl acetate
Ethyl ethanedioate

The use of these esters is expected to be effective in abating foam formation in casein and other protein compositions for such applications as paints, inks, and paper coating.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

An abrasion-resistant plastic is described as transparent, insoluble in common solvents, 20 to 30 times as resistant to abrasion as most clear plastics. Maker says that it retains its shape when exposed to high atmospheric temperatures, can be formed into large sheets at low pressures. (No. 640)

U S I

A textile finishing agent is said to be useful in replacing sulfonated tallow. It is claimed that 100 pounds of the new agent will do the work of 140 pounds of sulfonated tallow, and that the cost compares favorably. (No. 641)

U S I

A paper fabric is suggested by the manufacturer as a substitute for cloth and burlap. It is said that the cellulose fibers are effectively interlocked and fastened, resulting in high inherent wet strength independent of any coating or sizing on the surface. (No. 642)

U S I

A sealing liquid is said to protect wood or concrete against attack or infiltration by oil and gasoline, and can also be applied as a protective coating on steel. According to the maker, it resists attack by many solvents and fatty acids. (No. 643)

U S I

A multiple-drum mixer will handle four 50-gallon drums and the same number of 5-gallon drums, rotating them at 30 RPM to mix their contents. (No. 644)

U S I

Temporary protection for metal parts in storage or transit is provided by a new liquid which dries to form a stable, non-adhesive film, according to the manufacturer. It is claimed that the film is unaffected by oil, grease, gasoline, water, alcohol, brine solutions, will not become brittle under sunlight, and that it peels off as a complete film. (No. 645)

U S I

A new Buchner filter is said to retain all the advantages of this type of funnel, with the added feature of physical stability. The entire unit is supported by a cylindrical base that rests firmly on the table, and the filtrate is drawn off through a vacuum connection at the bottom. (No. 646)

U S I

Low actinic glassware has been developed especially to meet the need for colored laboratory glassware affording high protective value to certain light-sensitive substances, it is reported. The protecting red color is described as an integral part of the glassware. (No. 647)

U S I

A polarizing film is said to require no scarce imported materials in its manufacture. It is also available in the form of laminated glass, and while material is used for war purposes, limited supplies are reported available for experimental purposes. (No. 648)

U S I

A form liner for concrete is said to contain no restricted materials, and to strip cleanly away from a finished concrete surface. It is reported to be cheap enough to discard after use. (No. 649)

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Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C. P. 96%, Absolute
U.S.I. Denatured Alcohol
Anti-freeze
Super Pyro Anti-freeze
Solox Proprietary Solvent
Solox D-1 De-icing Fluid

ANISOLS

Ansol M
Ansol PR

ACETIC ESTERS

Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS

Butyl Oxalate
Ethyl Oxalate

PHTHALIC ESTERS

Amyl Phthalate
Butyl Phthalate
Ethyl Phthalate

OTHER ESTERS

Diatol
Ethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES

Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-taluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

ETHERS

Ethyl Ether
Ethyl Ether Absolute—A.C.S.

OTHER PRODUCTS

Acetone
Cellodions
Curbay B-G
Curbay Binders
Curbay X Powder
Ethylene
Ethylene Glycol
Nitrocellulose Solutions
Potash, Agricultural
Urethan
Vacatone

Registered Trade Mark.

the work done in connection with a large beverage distilling company saved more than \$20,000 per month on the cost of alcohol.

Plan being considered for container supply

It is possible, although not probable, by the time this is published, the Toiletries and Cosmetic Industry Committee may have worked out an agreeable plan for containers. Practically all supplies of wood, and therefore paper and cardboard are rapidly becoming scarcer. Not only by reason of the needs behind the lines, but because all battle action enormously steps up the need for supplies. In an active campaign in this war they need from 25 to 50 per cent more of any given thing than they do when the forces are in camp. The industry committee has discussed packages of all kinds. Drastic limitation will come.

Standardization of bottle sizes seen; no new moulds

Standard bottle sizes are absolutely certain. This means that bottles to be made in the future will be identical, no matter who uses them; but it does not mean that no more individual bottles may be made. It means no more moulds may be made to make new odd-size and odd-shaped bottles. Bottles made from existing moulds may be made in those moulds as long as the moulds last. Those who have been lucky enough to preserve moulds that have been unused for years will be in a happy situation. Obviously, things that are quaint and that are not bizarre, as are many current shapes and patterns, will be welcomed by a world that perceptibly is growing dead weary of the ultra-modern and sophisticated. So, hunt up your old moulds and produce quaint, odd bottles, just as you are using quaint old-fashioned type cuts, and layouts in your advertising. The order in prospect naturally will have to do also with closures.

Urge closures be made of glass, wood and ceramics

Fred Stock, the top sergeant of the Drugs and Cosmetic Section, frowns upon use of metals, plastics and paper for closures. He urges that they be made of glass, wood and ceramics. He forecast some time ago that what has come to pass would happen, that tinplate, terneplate and blackplate would be absolutely abolished for any type of closures. The other day they even prohibited the use of scrap taken from old bottle caps in connection with certain beverages. WPB also has imposed a tight control on the use of cork to in-

sure an equitable distribution among those who use the little cork discs. WPB also announced tubes made of cellulose acetate, and others of lead with paper lining. Studies of all aspects of containers and substitute materials are under the direction of Deputy Chief William W. Fitzhugh of the Containers Division.

New drugs and pharmaceuticals branch headed by T. W. Delehanty

Commerce Department again has had another of its periodic earthquakes. This time it has left the curious technological pattern of the last reorganization and has gone back to the splendid set-up that functioned so effectively under Dr. Alexander V. Dye, who, incidentally, has a rarely intelligent comprehension of Latin America. The new shuffle creates 17 major sections or branches in the Bureau of Foreign & Domestic Commerce. Drugs and pharmaceuticals embrace essential oils and most of the materials used by your industry. This is a new branch, formerly included in the Chemicals Branch several years ago. This new Drugs and Pharmaceuticals Branch is headed by T. W. Delehanty, formerly assistant chief of the earlier Chemicals Branch. Delehanty is a chemist who qualifies for this post by 15 years service in Commerce Department. During recent months he functioned as the forceful element in the now defunct Intra-Government Transportation Committee, a very hush-hush war agency which worked out quotas for exports and imports.

Barber becomes staff chief for cosmetics and toiletries

Lester Barber, very much Delehanty's junior in Commerce Service, becomes staff chief for cosmetics and toiletries. The industry also will have occasion to do business with the Chemicals Branch, headed by the same man who formerly was chief, Dr. C. C. Concannon. The latter is widely known in the industry. You will find the Cosmetics and Toiletries staff at Room 3324, Commerce Building.

Other changes in bureau heads of newly reorganized WPB

Chemicals Division in WPB has a new head, Dr. D. P. Morgan, who almost since the beginning, has been the deputy chief. He recently succeeded Dr. Ernest Reid, who has become director of one of the ten new bureaus which form the group units of the newly reorganized WPB, under the CMP. The bureau headed by Dr. Reid is called the Commodities Bureau. It embraces the Chemicals Division, Print-

ing and Publishing Division, Pulp and Paper Division, Cork and Asbestos Division, and Containers Division. Although anticipated, there have been no further changes in the Chemicals Division, or the Drugs and Cosmetics Section. Another new bureau, known as the Consumer Goods Bureau, headed by Lewis S. Greenleaf of Loudenville, N. Y., once industrial sales manager of Behr Manning Corp., Troy, N. Y., embraces beverages, food, tobacco, consumers durable goods, textile, clothing, leather, distributors.

White oils and waxes scarce; castor oil for cosmetics cut

White oils are scarcer and are gradually decreasing in supply. There are restrictions ahead, but it is not indicated yet that any orders are immediately in the offing. Bear in mind, however, that the ways of WPB like Bret Harte's heathen Chinese, are strange and mysterious—and unpredictable. Users of caffeine for beverage compounds were cut from 40 to 33 per cent in November. Castor oil for cosmetics was cut to 50 per cent of September consumption. Glycerine was cut 61 per cent for cosmetics and 21 per cent for beverages. Commodity Credit Corp. invites offers of sales on Tuesdays of each week by 4 p.m., of babassu oil, babassu kernels, castor oil, coconut oil, corn oil, palm kernels, palm kernel oil, palm oil. It anticipates beeswax and all other vegetable waxes rapidly will become scarcer. There is some hope that the supply of lanolin will increase because the process of recovery in this country is fast growing better. Also the Australian supply is increasing.

Essential oils for export bought through lend-lease

S. R. Weiner is the lend-lease specialist in the Department of Agriculture at 1239 South Building here in Washington. He has purchased considerable quantities of essential oils such as peppermint, wormseed, citrus, lemon, sassafras, caraway and coca, citric acid, citric extract, pine oil, orange oil, tangerine oil, corn oil, and toilet soap. The present debate within government revolves around lend-lease purchases of peppermint oil and our production is considerably less than 1,000,000 pounds this year. We usually consume considerably more than 1,000,000 pounds, plus imports. Not long ago we surrendered 180,000 pounds to lend-lease, chiefly for British use. Lend-lease now seeks to buy 50,000 pounds more. This will be in excess of 25 per cent of our domestic supply. Thus far lend-lease has purchased 12 different kinds of essential oils for distribution in various parts of the world.



Christmas

Greetings and Best Wishes
for a Happy and
Victorious
New Year

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WAR BONDS
and
STAMPS

NEWS and EVENTS

Authorization to get silica gel in 125 pound lots or less not necessary

Small orders of silica gel are exempted by General Preference Order M-219. It is not necessary any longer to get authorization for delivery and acceptance of 125 pounds in any one month.

Employer need not pay for time of employes during blackouts

Time spent by employes on the premises of an employer during air raid alarms where no work is done does not have to be paid for as "hours worked," the Wage and Hour Division of the U. S. Dept. of Labor has ruled.

Individual export licenses to Latin American republics extended

A two months' extension from the expiration of individual export licenses has been granted provided the following conditions exist: (a) An application has been made for freight space (on form BEW 138); (b) The shipping priority rating on the license affected is "AA," "A," or "B"; (c) The license is scheduled to expire within two months from the date of certification of the freight space application to the War Shipping Administration, by the Office of Exports; (d) The certification is to be made more than five days prior to the expiration date of the export license.

Protective coating experience boon to collapsible tube users

Trends in packaging and the extent to which substitute materials have been made, and may be utilized in the various fields of packaging, were developed in the keynote address by President Joel Y. Lund at the annual meeting of the Packaging Institute, Inc., Hotel New Yorker, New York, N. Y., early last month. Development of protective interior coatings for collapsible tubes has contributed to relief of manufacturers using tubes, he said. With the possibility that after the first of next year tubes will have to be made entirely of lead, Mr. Lund declared "we now have a year's background of experience to

show us which coatings are the most satisfactory."

Mr. Lund, who is a vice-president of Lambert Pharmacal Co., St. Louis, Mo., was re-elected president of the institute. Vice-presidents elected were A. Vernon Shannon, sales manager, Westfield River Paper Co., Russell, Mass., and Wallace D. Kimball, first vice-president, Standard-Knapp Corp., Portland, Conn.

War time conference of dry goods association Jan. 11-15

The National Retail Dry Goods Assn. will hold a five-day war time conference at the Hotel Pennsylvania, New York, N. Y., January 11 to 15. The effect of the war on retailing, manpower, limitation of inventories, taxation and credit, transportation and price regulation will be among the subjects considered. A general session will be devoted to post war planning.

Court rules U-X Mfg. Co. shaving stick to be cosmetic and drug

A shaving stick, shipped by U-X Manufacturing Co., has been held to be both a drug and a cosmetic by U. S. District Judge John W. Clancey, in New York. Hugo Mock, counsel for the claimant, contended that the product was neither a drug nor cosmetic, but a shaving stick of "unique composition and properties." The decision followed a trial resulting from a seizure in Pittsburgh in March, 1941, of a quantity of the shaving sticks. "U-S Improved Shaving Medium" shipped from New York by the company. Failure to declare ingredients and false and misleading statements were alleged by the FDA.

Plans for annual banquet discussed by cosmetic credit men

Plans for the annual holiday party of the Drug, Cosmetic and Chemical Credit Men's Assn. were discussed at the Nov. 19 meeting of the association in the Duane Hotel, New York, N. Y. It was the first meeting at which W. E. Foster, the new chairman, presided. The annual banquet and entertainment will probably be held January 22.

New plants needed for greater alcohol output

Construction of new plants for greater alcohol production will be necessary to meet the growing requirements for industrial alcohol during 1943, Dr. Walter G. Whitman, assistant chief of the WPB Chemical Division, told members of the Industrial Alcohol Producers Advisory Industry Committee at a meeting November 19. The industry also was advised to economize on transportation of alcohol. Stricter regulations are in store if voluntary steps are not taken to solve transportation problems, it was stated.

New mining apparatus may help to ease tin shortage

A new electro-static separator designed to disengage tin from low grade ore has been announced by Westinghouse Electric and Mfg. Co. In tests made the new equipment has separated tin from low grade ore found in North Africa and from other similar ore. The company announcement says "If the new device is as efficient in actual operations as in laboratory tests, it can be a valuable aid in easing America's tin shortage." It is stated that there are large deposits of low grade ore in the U. S.

Johnson & Johnson elect war time officers of company

New war time officers of Johnson & Johnson, New Brunswick, N. J., all of whom are members of the board of directors, are: F. A. Cosgrove, president; A. B. Hill, vice-president in charge of sales; E. E. Dickson, vice-president in charge of manufacturing; G. S. Mathey, vice-president and director of research; J. S. Johnson, vice-president; H. D. Henry, director of merchandising; G. W. Achenbach, director of purchases; N. L. Smith, assistant treasurer and president of the Chicopee companies; W. J. Walters, assistant secretary and president of Johnson & Johnson, International. Mr. Cosgrove continues as treasurer. Kenneth Perry, general counsel, was also elected a vice-president.

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Maker fixes cosmetic price—O.K. if OPA doesn't object in 15 days

An automatic price regulation to cover new and changed products in cosmetics and toiletries was described by Edward P. Morrish of the Office of Price Administration in an address at a conference of Midwest manufacturers, members of the National Beauty and Barber Industries Assn. The order, M-(P.R.) No. 282 was issued by OPA Dec. 8.

It provides that prices are to remain the same, despite changes in containers, on the assumption that the products are bought for their contents.

It deals with cases of changed formula, size of containers and new products. Manufacturers may determine their own maximum prices on new and changed products and report them to the OPA. If there is no objection from the OPA within 15 days, the submitted maximum price becomes the sanctioned price.

It is the purpose of OPA to maintain prices at March levels and also to maintain quantity and, in so far as possible, within the limits of its judgment, to maintain quality.

The order lists the numerous types of cosmetics to which it applies.

Curbs on metal closures being revised by WPB

Essential products, such as health supplies, beverages, household and industrial specialties and chemicals, requiring metal closures will be allowed the use of them in the rewritten version of WPB Order M-104 which is to be issued shortly, according to reports.

E. P. Bertrand, of the Owens-Illinois Glass Co. during the container symposium of the National Assn. of Insecticide & Disinfectant Manufacturers Inc., in New York Dec. 9 reviewed the workings of simplification limitation Order L-103 of the WPB, under which the glass industry is now operating, wherein making of molds for new shapes or sizes not previously existing in the industry were forbidden. Some few requests for new molds for new items have been granted but most applications have been denied.

In addition to the definite schedules contained in the order, which control sizes and shapes of glass bottles permissible for use in packaging whiskies, wines, beers and some food products, Mr. Bertrand said, schedules for other industries are being considered by the WPB and may be announced within the near future.

With regard to the outlook for paper containers, the speaker declared lack of lumber for manufacture of wood containers will require additional quantities of paper as a substitute. Transportation regulations and lack of ex-

perienced labor, he added, have prompted requests from railroads for improvements in boxes currently used, which, he said, would require a larger amount of tonnage.

J. N. Davies, Aridor Co., Chicago, Ill., another participant in the symposium, urged standardization on bottle sizes to permit use of the smallest size of metal caps. Every effort is being made by industry and government, he added, to find a suitable substitute material for metal closures, which can be produced in the necessary quantities along present production lines.

Officers of the association were elected as follows: J. N. Curlett, McCormick & Co., Baltimore, president; Henry A. Nelson, Chemical Supply Co., Cleveland, first vice-president; Gordon M. Baird, Baird & McGuire, Inc., second vice-president; John Powell, John Powell & Co., treasurer, and H. W. Hamilton, Koppers Co., white tar division, secretary.

Cosmetic credit men to hold victory dinner Jan. 22

The annual dinner of the Drug, Cosmetic and Chemical Credit Men's Assn. will be held at the Hotel Duane, New York, N. Y., January 22. The December meeting is to be held at the Hotel Martinique, December 17.

Tin Salvage Institute reclaiming metal from over a million used tubes

The steps taken to reclaim metal from the time used collapsible metal tubes are turned in at the drug store when a new tube of shaving cream or tooth paste is purchased have been outlined

by Willis M. Rose, president of the Tin Salvage Institute. More than half a million pounds of tin has been reclaimed by the institute. First the tubes are collected by the stores and sent to the institute. Then they are sorted into tin, lead and aluminum tubes. The metal is then melted and cast into ingots. The ingots are shipped to war plants. Although the institute is working on a stock pile that contains over one million empty tubes, many more are needed. The Tin Salvage Institute is a government agency that is actually making money for the government.

New cod liver oil cosmetic to be launched

A new cosmetic based on cod liver oil therapy is to be launched by the Vad Corp., New York, N. Y., in February.

Foragers to elect new officers Dec. 29

New officers will be elected by the Foragers at the December 29 meeting. The annual banquet will be held at the Midston House, New York, N. Y., January 9.

Next to tobacco and money, soldiers want toilet articles for Christmas

A research division of the War Dept. asked 1,205 representative soldiers what each would like as a gift, assuming that the sender had two or three dollars to spend on it. Tobacco came first, then money and then toilet and shaving articles in the order of preference. Candy, books and articles of clothing followed.



Workers at Hillside plant sorting used collapsible tubes that will be used to reclaim metal

T

his Holiday Season carries us into a

new year.

May we express to our friends our sincere appreciation for their splendid cooperation with us through the unusual conditions we both have met in the year just closing?

For the new year we pledge our utmost efforts, not only to our customers but in everything and all that serves our country in this time of unprecedented war needs to achieve victory.

IN THAT SPIRIT, WE EXTEND THE

SEASON'S GREETINGS AND ALL GOOD

WISHES FOR THE COMING YEAR.



PRODUCTS CORPORATION

L. J. ZOLLINGER, President

12 EAST 22nd STREET

NEW YORK, N. Y.

No returns required for tubes now packed as gifts in Canada

For a limited time gift sets and kits containing tooth paste or shaving cream in metal tubes may be sold without the purchaser turning in used tubes, the Wartime Prices and Trade Board of Canada has announced.

A time limitation is imposed by an order which prohibits packing tubes of shaving cream or tooth paste in gift sets or kits. However, until those already packed are disposed of, no turn-in tube will be required.

Commerce Department host at showing of Guenther films

The Bureau of Foreign and Domestic Commerce of the Department of Commerce was host to nearly 150 guests on November 19, in the Commerce Building's Washington auditorium, at a presentation of colored motion pictures featuring the production of essential oils in the Western Hemisphere taken by the commentator of the evening, Dr. Ernest S. Guenther, chief research chemist of Fritzsche Brothers, Inc., New York, N. Y. Dr. Guenther was introduced by Lester A. Barber, chief of the Department's Merchandise Staff, Consumption Goods Materials Unit of the Division of Industrial Economy, who pointed out that the purpose of the presentation was to focus attention upon the increasing importance of this country's essential oil industry to the manufacturers of food products, pharmaceuticals, toilet goods and a great variety of everyday household products essential to home use. Mr. Barber emphasized the government's interest in furthering the development of American sources of these most necessary oils and took occasion to compliment Dr. Guenther and his organization for the splendid contribution they were making to this effort.

A letter from Atherton Lee, director of the Department of Agriculture's famous experimental station at Mayaguez at the time of Dr. Guenther's visit to Puerto Rico, in which he expressed regret that instructions to proceed to Haiti prevented his being present personally to represent the Office of Inter-American Affairs, was read in the course of Mr. Barber's introductory remarks.

Dr. Guenther prefaced his presentation with an explanation of the difference between essential oils and fixed oils and in a general way, discussed the various applications of the former and the principal methods of production. His pictures which followed were confined to essential oil production in the Western Hemisphere and were

those taken during a recent flying tour of the islands of the Caribbean, Central and South America and on the occasion of visits to principal producing centers in the United States.

The meeting was largely attended by representatives of the Department of Commerce, although executives of OPA, WPB and other government agencies were present. Besides Dr. Guenther, Fritzsche Brothers' representation included among others, F. H. Leonhardt, president, and vice-presidents Joseph A. Huisking and H. P. Wesemann.

Shulton employees give annual dance and revue

Employees of Shulton, Inc., New York, N. Y., producers of Early American Old Spice and Friendship's Garden toiletries, gave their fourth annual revue and dance November 20. The program, dedicated to the Shulton boys now in the armed services, included patriotic sketches, as well as dance specialties and musical and dramatic numbers. Al Doyle directed the revue, which was held in the auditorium of the Joseph F. Brandt school, in Hoboken, N. J.

Dancing followed the show. The entire cast and ensemble of the revue included employees of Shulton's Hoboken and New York City offices.

Canadian board rules powder and chip soap be marked for weight

Mrs. Phyllis G. Turner, administrator of oils and fats for the Prices Board of Canada, announced that effective in mid-November manufacturers must show clearly on the containers of their products the packed weight of all granulated powder or sprayed soap, soap chips, or flakes, washing powders, cleansers and scouring powders manufactured by them.

The order states that the weight of bars of toilet and laundry soap and

bar cleansers must not be changed. Continued quality of output is guaranteed by a provision forbidding any manufacturer from selling or delivering bar or packaged soaps or cleansers differing in quality from those sold during the basic price ceiling period of 1941.

If a manufacturer improves his product and wishes to market it, he may obtain the administrator's permission to do so, with no price increase allowed.

BIMS abandon golf for the duration but plan two gatherings

The BIMS of New York have abandoned the monthly golf tournaments during the season for the duration of the war. However it is planned to have several get together meetings during the Winter, the first of which will probably be held in January, and the second in March, at the Hotel Lafayette, New York, N. Y.

War to take all new distilled spirits

The entire production of the nation's distilled spirits industry will be diverted for war purposes from now on.

Directives have been issued to the industry to ship the entire production of "high wines" to redistilling plants for conversion into 190 proof industrial alcohol. Approximately half the industry, by volume, has been converted to making industrial alcohol since early in the year. This action enlists the output of the other half. The combined output of the entire industry is expected to reach 240 million gallons a year of industrial alcohol.

Ralph L. Evans Associates give dinner for staff

Honoring their staff for the year's work, Ralph L. Evans Associates, consulting research chemists, entertained with a dinner recently at the Hotel Biltmore, New York, N. Y. Sixty-eight attended.



Employees of Ralph L. Evans Associates make merry at dinner given recently in their honor

♦

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LOS ANGELES

Canadian freezing order being clarified in practice

The so-called "freezing order" No. 184, in Canada reads as follows (Sec. 8): "No manufacturer or wholesaler shall sell any class and kind of goods to any retailer, wholesaler or operator of a service business to whom he has not previously sold that class and kind of goods unless the seller is satisfied that the buyer holds a valid license issued by the board and is entitled under the provisions of the order to deal in such class and kind of goods or has obtained from the director of licensing a permit to deal in such class and kind of goods." Sales by manufacturers to other manufacturers or by wholesalers to manufacturers are not restrained. The order became effective Nov. 2 and since then many points which puzzled manufacturers have been clarified. If manufacturers sold to a retailer or wholesaler prior to Nov. 2, 1942, they may sell to him now.

Plough, Inc., starts 1943 with 284 radio stations

Plough, Inc., Memphis, Tenn., will employ a total of 284 radio stations to promote Penetro and St. Joseph aspirin in 1943. In addition, 500 daily newspapers and 2800 weeklies will be used.

WAACs will be designated for pharmacy assignments

WAACs will be designated for pharmacy assignments, according to the office of the commandant at Fort Des Moines, Iowa, which made the decision in response to an inquiry by Dr. Ralph Beinfang of the School of Pharmacy, University of Oklahoma, Norman, Okla. According to the letter to Dr. Beinfang from the adjutant, candidates who desire to enroll in the capacity of pharmacists must be graduates from an accredited school of pharmacy or possess a state license to practice pharmacy in addition to having previous practical experience. Qualified enrollees will do the same type of work in various hospitals as is done by hospital pharmacists at the present time.

Sugar substitutes and esters topics of California flavor assn. meeting

Ben Kapp, Pacific Coast representative for Van Dyk & Co., with his headquarters in Los Angeles, Calif., spoke on "Esters and Ethers" at the November dinner-meeting of the Flavoring Extract Manufacturers' Assn. of California. The address was so well received that Mr. Kapp was prevailed upon by those present to continue his discussion at the December gathering

of the association. Another subject treated at the November meeting was sugar substitutes, two sugar men discussing the various ones which are available. It was reported that 14 members reported in a body to the Red Cross blood bank during the early part of November and that they would return to the bank January 15 in a body to give another pint.

OPA authorizes premium on small lot vanilla bean sales

The army recently announced it has devised a tablet that looks like aspirin, which disintegrates in hot or cold liquids, composed of lactose, corn starch and vanillin, which army cooks use for cakes, pastries and puddings. A five-grain tablet is equal to a teaspoonful of pure vanilla extract. A box of tablets is half as long as a pencil. One hundred ninety-two tablets are equal to a quart of liquid vanilla. OPA authorized primary dealers and wholesalers to charge premiums on sales of 50 pounds of vanilla beans or less. Sesame seed may no longer be imported without special WPB authority. OPA announced raw spices, and spice seeds may be sold at the highest prices charged in March when sold in quantities of less than one original import package. OPA has a new method to compute war risk insurance rates. Send for OPA-T-332. OPA warned manufacturers, wholesalers, retailers and others who deal in cosmetics to desist from operating under any "tying sales" plan.

New emulsifying agent for cosmetic products

A new emulsifying, suspending and stabilizing agent, described as a polyose derivative, is offered in the English market, according to G. Abrahamson. It is soluble in water, is recommended especially for creams of the water-in-oil type and is said to give a highly viscous solution which sets on standing into thick, stable, colloidal gels free from undissolved, suspended particles and not easily attacked by bacteria. Two varieties are on the market: one yellowish white for emulsions of low oil content, the other yellower for those of high oil content. It is supplied as a wax, powder, flakes or liquid.

New York Federation of Jewish Charities holds 25th anniversary

The 25th anniversary of the New York Federation of Jewish Charities was commemorated by the wholesale cosmetic and drug industries at a dinner on December 16, at the Hotel New Yorker. The dinner was sponsored by the Wholesale Cosmetic and Drug Di-

vision of the New York and Brooklyn Federations.

The associate chairmen of the dinner committee serving with co-chairman Herman L. Brooks and William F. Murtha, included: B. Harry Badanes, I. H. Bander, Louis I. Furlager, William Jacobs, Arthur J. Kinsman, A. H. Bergman, Robert E. Curran, Dr. Harry E. Dubin, Meyer K. Katz, Hugo Mock, Lincoln Morton, Jack I. Poses, Benson Storfer, Jack J. Weisman and others.

DCAT section names executive committee at annual meeting

The Drug, Chemical and Allied Trades Section of the New York Board of Trade held its 52nd annual meeting and election of the executive committee at the Drug and Chemical Club, New York, N. Y., November 17, with approximately 125 executives present. S. B. Penick, Jr., president of S. B. Penick & Co., and chairman of the section, presided at the meeting which was featured by the address of Frank A. Delgado, chief of the Drugs, Fine Chemicals and Health Supplies Section of the Office of Price Administration.

Pond's sends holiday gifts to 150 employees now in service

Each of the 150 members of Lamont, Corliss and Co., distributors of Pond's toilet goods and Nestle's chocolate products, who is now in a branch of military service will receive a Christmas box from his home office, it was announced recently by G. L. King, vice-president and general sales manager of the company. The box is to contain such items as a carton of cigarettes, can of cocoa and an assortment of chocolate bars, hard candy, sewing kit, razor blades, book, handkerchiefs, razor blade sharpener and toilet kit. The food is omitted in overseas packages, due to military mailing regulations.

Cigarettes and chocolate have been mailed out regularly to these men for some time, Mr. King disclosed, a custom which will be continued indefinitely.

To give the men news of their former associates, a service bulletin is mailed out periodically from the New York office.

Avoid flooding authorities with questions about restrictions

Dr. F. J. Cullen, executive vice-president of the Proprietary Assn., has advised members who manufacture cosmetics against becoming jittery and against flooding the authorities with questions about restrictions. Unnecessary questions about restrictions may stir up a type of thinking that otherwise would not develop.



*Specializing in Spanish Essential Oils
At Lowest Prices*

**Rosemary Oil
Spike Lavender Oil
Labdanum Gum
Labdanum Oil
Mousse de Chene Concrete
Tangerine Oil**

We offer Mousse de Chene Concrete of highest quality from stock in New York at \$48.00 lb.

We are now also able to offer fine quality Imitation Oil of Cassia in large quantities and welcome your inquiries.

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70 December, 1942

The American Perfumer

William Russell heads Allied Drug & Cosmetic Assn. of Michigan

The Allied Drug & Cosmetic Assn. of Michigan held its annual Christmas party December 4 at the Book Cadillac Hotel, Detroit. Wilbur Elliott was chairman of the affair which featured a smorgasbord type of dinner instead of the banquet of former years.

New officers of the association for 1943 are: President, William M. Russell, Monsanto Chemical Co.; vice-president, E. E. Van Allsburg, Ecclestone Chemical Co.; secretary, M. G. deNavarre, M. G. deNavarre Associates; treasurer, Stewart Cowell, J. T. Baker Chemical Co.; executive committee, A. S. Bedell, Beauty Counselors, Inc., D. Melville, Frank W. Kerr Co., G. Snider Commercial Solvents Corp., and A. R. Vicary, Mark W. Allen Co.

Fritzsche Quarter Century club honors H. P. Wesemann

Hans P. Wesemann, vice-president and director of purchases, of Fritzsche Brothers, Inc., New York, N. Y., has been installed as the eighteenth member of the exclusive Fritzsche Quarter of a Century Club. Membership in the club is made up of company personnel who have been with the organization for twenty-five years. At a luncheon tendered Mr. Wesemann, tribute was paid him for his long and valuable service with the company by F. H. Leonhardt, president of Fritzsche Brothers. A. R. Welcke, first vice-president and treasurer of the company, where he has served for fifty-seven years, presented Mr. Wesemann with a substantial government war bond. Mr. Wesemann was the recipient also of a sterling silver service from the employees as well as gifts from members of his department. Other club members present included in addition to Messrs. Leonhardt and Welcke: Misses Mary Neary and Mae Caufield, R. R. Redanz, assistant treasurer, William Barnes, Thomas Coyle, Francis Riley, Charles Schneider, Albert Wardman and William Keller.

Double or something for women in pharmacy

Twice as much opportunity as ever before awaits Miss Charlene Paden, and Miss Narcissus Esterling, upon completion of their education in the School of Pharmacy, University of Oklahoma, Norman, Okla. Here's what they can do when they get through: Take a position as a pharmacist; replace a male pharmacist who has gone to the armed forces; join the WAACs as a hospital pharmacist, or take an examination for civil service pharmacy position.

Costs of pharmaceutical education



Well paid future for pharmacists

beginning with the second semester 1943 at the University of Oklahoma have been materially reduced. Also a course in military pharmacy will be included in the curriculum from that time forward.

In addition to preparing men students for service as pharmacy technicians, U. S. Army, and as pharmacist's mates, U. S. Navy, the School of Pharmacy now invites girls in greater numbers to its classrooms so that pharmaceutical service to the nation both in military and civilian categories may not suffer.

Obituaries

Lionel Davis

Lionel Davis, a member of the sales department of the Los Angeles, Calif., branch of Shulton, Inc., died November 20 in Santa Monica, Calif. He was 38 years of age. For the past seven years he had handled the company's Pacific Northwest territory.

He is survived by his father and mother, Mr. and Mrs. Victor Davis.

Harry J. Schnell

Harry J. Schnell, president of the Schnell Publishing Co., Inc., New York, N. Y., and editor and publisher of *Oil, Paint and Drug Reporter* and *National Painters Magazine*, died unexpectedly November 29 in the Orange Memorial Hospital, Orange, N. J. He was 67 years old and for 52 years had been associated with the publications of which he became owner in April, 1941.

Mr. Schnell was 15 when he got a job in 1890 with the late William O. Allison, publisher of *Oil, Paint and Drug Reporter*, the old *Painters' Magazine* and *The Druggist Circular*.

In April, 1941, in the course of settlement of the Allison estate in proceedings in the New Jersey prerogative court, Mr. Schnell acquired the assets represented by the publishing properties and organized the Schnell Publishing Co., Inc.

Mr. Schnell in the course of his long

career built an international reputation as a business paper publisher and won countless friends through his intense activity in trade association work in the many industries served by his publications. For many years he was chairman of the house committee of the New York Drug and Chemical Club and when he became president of the club in 1927 a testimonial dinner was given for him in recognition of his services to the organization.

Mr. Schnell was born in New York February 15, 1875. His father came to this country from France. In 1898, Mr. Schnell married Miss Sara Jane Bainbridge. She died in 1912. A son, Harry J. Schnell, Jr., of the chemical division of the War Production Board in Washington, and a daughter, Mrs. William Stuart Auchincloss, of Short Hills, N. J., survive.

T. L. Taliaferro

T. L. Taliaferro, general manager of Phoenix Metal Cap Co., Chicago, Ill., died at his home, Nov. 17, at the age of 62 years. He was born in Gloucester County, Virginia.

Prior to joining the Phoenix Hermetic Co., in 1913, the predecessor of the Phoenix Metal Co., he was associated with the American Can Co., the Continental Can Co. and the Hazel-Atlas Glass Co.

He invented the first machine for producing flowed in rubber composition gaskets used in vacuum sealing, sterilizing and processing and originated the first automatic ovens for oxidizing or baking lithograph inks, lacquers and coatings on metal plate.

Clyde N. Thomas

Clyde N. Thomas, for many years credit manager of the Mefford Chemical Company, Los Angeles, Calif., died in November. He was born in California 48 years ago and had been with the Mefford company since 1922.

Gus C. Weil

Gus C. Weil, long associated with the Klinker Mfg. Co., Cleveland, Ohio, died on November 15. Mr. Weil had been the president and active head of the company until about two years ago when, due to illness, he was forced to retire. In 1906, Mr. Weil bought a controlling interest in the Klinker Mfg. Co., and in the following years became widely known in the cosmetic industry. A son, Leon G. Weil, became associated with his father in the business of manufacturing cosmetics in 1919, succeeding the senior Mr. Weil as president, when the latter retired. The company will continue under the management of Leon G. Weil.



*At this happy season
We wish to thank
The friends who have
Favored us with
Their patronage and
To include in our
Greetings also those
We hope to serve . . .
May our future relations
Ever reflect the
Good fellowship of the
Holiday Season*

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AND A
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Our large production and close selling margin make it possible for you to buy standardized, air-floated POWCO BRAND Neutral Soaps of better quality—at a saving.

If you manufacture a tooth paste, tooth powder, or a toilet requisite, you want the choice of soaps best suited to your formula. That's why POWCO BRAND Soaps offer you a wide range of characteristics from which to choose. And once you adopt a POWCO BRAND Soap you always get the same *uniformity* of physical and chemical properties because they are *laboratory controlled*.

Our laboratory will gladly work with you in determining the POWCO BRAND Neutral Soap which fits your formula most advantageously.

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Mobilize all idle machines for war work urges Consolidated Products

M. I. Cowen, secretary of the Consolidated Products Co., is appealing to all manufacturers in the process industries to mobilize any machines which are not in use for the war effort. His company, it is pointed out, has the resources and facilities to place such machinery where it will help win the war. A list of machines which are idle and can be dispensed with is requested. They will be purchased. The company, incidentally, had a striking exhibit at the recent National Chemical Exposition in Chicago. The services of the company "to save time to save America" were graphically illustrated.

One gold star on Fritzsche service roll of forty

With the announcement that its service flag now proudly displays forty stars for the men in its employ who have joined the country's armed forces, Fritzsche Brothers, Inc., New York, N. Y., adds regretfully that one of these has been changed to gold. The gold star honors the memory of Earl Hawkridge who left the company early this year to enter the Coast Guard. Reported as missing over a month ago, the Navy has recently given him up as lost. Young Hawkridge would have been 19 years old this December. An only son, he is survived by his mother and father.

Why wholesale prices of soaps and cleansers were revised

Revision of the wholesale pricing of household soaps and cleansers and soapless detergents to remedy a situation in which 54 wholesalers were operating with a price ceiling below the maximum prices charged by soap manufacturers was announced recently by the Office of Price Administration.

The action, taken through Amendment No. 46 to Supplementary Regulation No. 14 under the General Maximum Price Regulation and effective November 5, permits no increase in retail prices of the soaps and cleansers and allows an increase in wholesale prices only where the wholesaler is caught in the "squeeze" caused by the manufacturers' maximums. These soap items were not treated under the recent Regulation No. 237 which provided adjustment margins for many grocery fixtures was announced recently by the case of soap the hardship was confined to a relatively few firms.

Setting dollars-and-cents maximums for more than 100 products, the amendment allows the wholesaler who needs to be "bailed out" to add a 1 per cent mark-up above carload price before application of discount for cash. This dis-

count is 2 per cent on the carload. The total industrywide mark-up prescribed under the new amendment thus is 3 per cent over what is known in the trade as "dead end net," or their customary mark-up, whichever is lower.

The General Maximum Price Regulation established ceilings for wholesalers at their highest prices during March 1942.

In January and February 1942, however, soap manufacturers had advanced their prices twice, each advance amounting to approximately $3\frac{1}{4}$ per cent on their total annual sales of household soap.

At the request of OPA, the February price advance generally was rescinded in June 1942, but OPA deemed it inadvisable at that time to require manufacturers to rescind the advance of January.

As a result of forward buying by some wholesalers, the increases were not reflected in their prices until replacement at the higher cost was necessary after March 1942.

Thus, after promulgation of the General Maximum Price Regulation, some wholesalers found their maximum prices were below the actual cost of acquisition. At the same time, other and competitive wholesalers had advanced their prices before or during March in line with the manufacturers' advance and were able to sell to retailers at a price equal to cost of acquisition plus customary mark-up.

The wholesalers' margin of profit in the soap field is considered unusually low. Some large cooperative wholesalers, selling to retail stores in great volume, handle soap products at a 2 per cent gross mark-up, equivalent to the discount for cash in carload purchases. The majority handle soap products at a gross mark-up of 3 to 6 per cent, while some service wholesalers realize as much as 10 per cent.

OPA determined that, while most soap wholesalers can operate on the gross mark-up of 3 per cent over "dead end net," less than this would, in almost all instances, result in substantial hardship to the wholesalers.

Trade Jottings

Dorothy Gray has added Southern Magnolia Bouquet to the Floral Fantasies series. The packaging is the same as that used for the other odors.

Mona Manet used five women war workers as models in her "Time-Budget" demonstration December 1. Treatments in Miss Manet's salon have been streamlined so that a woman war worker may have a shampoo, restyle finger wave (including hair cut), manicure and make-up in 41 minutes. Ex-

amples of speed-up of service for the salon's clients are: a complete make-up in less than five minutes and a permanent in one hour and twenty-nine minutes.

Coty's director of advertising, Walter B. Neuburg, discussed "Cosmetics, Woman's Heritage Through the Ages" November 24 at the Coty salon on Fifth Ave., New York, N. Y. He traced the development of methods to beautify the body from the beginning of time down to recent centuries, using slides to illustrate his talk.

Kathleen Mary Quinlan offers a basic treatment kit, Fly-by-Night. One model is packed with essentials for the normal dry skin, the other with preparations for the thin, sensitive skin.

Ponds presents Cheeks, its rouge, in a leaf-green plastic case to match its lipstick, Lips.

Barbara Gould will have a special offer, \$2.25 jar for \$1.25, on her Velvet of Roses dry skin cream between February 12 and March 6. This is an emollient type cream designed to take care of winter dryness.

Tone Laboratories, Inc., offers a triple duty foundation, Special Dahlia, which serves as a make-up base, lubricates the skin and protects it from exposure to wind, steam heat or sun. The new foundation is presented in the firm's familiar black and white jar.

Parfums Schiaparelli is featuring a series of French musical programs on Friday night over WQXR to promote the perfumes Shocking, Sleeping and Salut. The programs are designated "Paris Again."

Primrose House collaborated with Mary Goodfellow, hat designer, in a luncheon fashion show, November 24 at the Ritz Carlton hotel, New York, N. Y. The theme "Lovely to look at," stressed the importance of affinity between coiffures make-up and hats. Leo, hair fashion creator for the cosmetic house, and his staff devised basic hair-dos for the individual which may be converted into three different styles with a minimum of effort and the cosmeticians chose the shades most becoming to the individual skin and hair coloring and in harmony with each hat.

Milkmaid's sampler, for use in stores which carry Milkmaid products, displays the complete make-up line. It is a flower decorated chest of painted wood, grooved to hold the seven lipstick shades and their harmonizing rouges. Face powder shades are shown in little glass vials with shaker tops which are fitted into one tray of the counter display case.

Looking Forward

We view the NEW YEAR with confidence in the future of our country and of our business, and wishing our many friends in the industry a Happy and Prosperous 1943, we gladly promise that the months ahead will find us as ever

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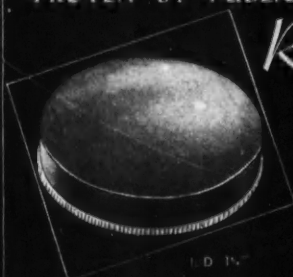
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Lipstick
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Push-Up
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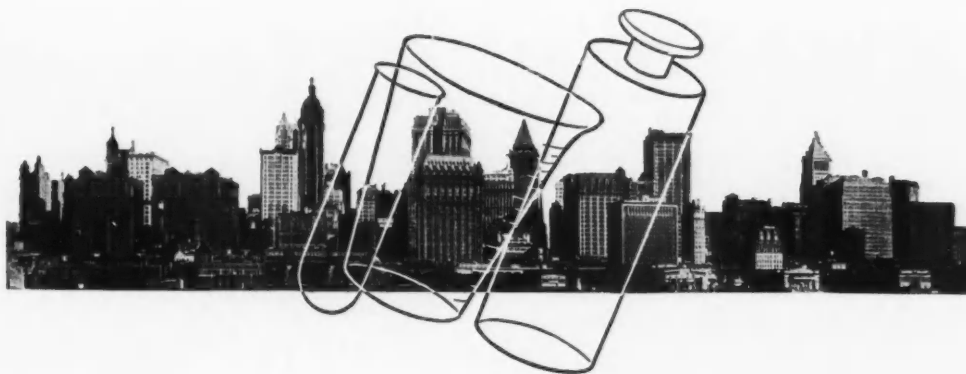
Both JUNIOR and SENIOR feature the new double slot construction, which eliminates any possibility of jamming and provides free action.

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Prices Decline in Year-End Market

WHILE business in raw material markets was reported as quiet throughout most of the period under review, the situation generally proved highly interesting from a price standpoint with a number of articles registering further declines.

VANILLA BEANS ACTIVE

About the only real encouraging development was the improved demand for vanilla beans, with local importers attributing the increased activity to the recent treatment of the alcohol tax and the establishment of ceiling prices on all grades of beans. For the first time in a long while extract manufacturers were inclined to place a moderate degree of confidence in the market despite the fact that they did not know just how much alcohol would be made available to them early next year. Manufacturers felt that all of the uncertainties that had prevailed for the past six or eight months were removed.

Most of the activity was centered on the Mexican varieties since virtually all of the Bourbon beans from Great Britain had been distributed. The Mexican crop continued to be estimated at about 300,000 pounds. New crop cut beans should begin to arrive here in March while whole beans usually begin to appear on this market in June. Java and South American beans have been fairly well cleaned up on spot. Some Tahiti beans continue to be offered here, but the demand for this variety continued to be limited to small lots.

Another favorable development in vanilla beans was the announcement by the OPA to the effect that primary dealers and wholesalers would be permitted to charge premiums on sales of 50 pounds or less. The action was taken because ceiling prices did not make adequate provision for additional costs of small lot transactions. Under amend-

ment 65 to Supplementary Regulation No. 14 of the General Maximum Price Regulation, effective December 2, 1942, importers or primary dealers are allowed a 1 per cent premium over the specific maximum prices. Premiums permitted in both instances, it was emphasized by OPA, apply only to sales of 50 pounds or less and may be added to the established ceiling price provided under amendment 35 to S.R.14.

LIME OIL DECLINES

In the essential oil market, lime registered a series of declines because of competitive conditions. Toward the close of last month, however, some houses, which had been meeting the competition from outside sources, explained that they were obtaining a fair volume of orders and that on the basis of replacement costs for oil of suitable quality, they would not continue to meet the low prices. Large consumers were warned to check the quality of the merchandise before buying some of the low price oil that was offered in certain directions. The change in attitude was attributed also to a report circulated about the market to the effect that the production of both Mexican and West Indian lime oil had been practically all sold.

Lemon continued to be about the only firm spot in the citrus oil group. Quotations on California oil were reduced as the result of competitive conditions brought about by liberal offerings of Brazilian oil.

DOMESTIC ITEMS REPLACE IMPORTS

Some of the price adjustments in favor of buyers were due to domestic distillation of materials which ordinarily are imported. Among those so affected were celery and coriander. Even at the decline, quotations were high enough to deter large purchases.

On the firm side were such items as oil bay and Brazilian bois de rose. Advices from Puerto Rico suggest a coming sharp rise in replacement costs and, according to reports, the West Indian oil is in very poor supply.

AROMATIC CHEMICALS SLOW

Trade in aromatic chemicals was along narrow lines. The movement to the soap trade continued at a generally reduced level because of the inability to secure coconut and palm kernel oils. Perfumers were slow in ordering out deliveries and buying on the part of the cosmetic trade was limited due to restrictions and regulations.

A few of the chemicals derived from oils displayed a softer tone in keeping with lower costs but the market as a whole remained fairly steady. A further tightening in benzol, complete allocation of phenol, and difficulties in securing other basic materials all served to have a decided influence on the general position.

POTASH COMPOUNDS OFFERED

Among the industrial chemicals, potash compounds continued to be offered quite freely because of the unsatisfactory conditions prevailing in certain branches of the soap trade. War time needs of alkalies are on the increase. Substantial quantities will be needed to meet the demands from the synthetic rubber industry that are expected to come early next year as new plants go into production. A good tonnage of soda ash is already reported moving, especially to the glass industry.

Among the gums, high grades of tragacanth remained firm because of poor supplies. Trade factors were inclined to take a more bullish view regarding the long term outlook in gum Arabic. There are good stocks here but, according to reports, no import licenses had been granted up until late last month and the future concerning replacements is highly clouded in view of shipping conditions.

THERE IS
No Doubt
ABOUT IT!



WE have a job to do. A healthy industry behind a healthy war effort is going to accomplish the final Victory.

In co-ordination with our Country in its war needs, we are glad to pledge ourselves to the service of both Government and industry.

For Rose Odors

BUTYL PHENYL ACETATE

Excellent in Rose Odors and Floral Odors generally Has fruity, floral characteristics and is very stable Economical to use and there is still an ample supply



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76 December, 1942

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Chemically tested for quality and
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own method.

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Beeswax

And because of its superior quality
you can use less and still get a
finer finished product. Guaranteed
pure...guaranteed always the same.

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Established 1855
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Spermaceti Ceresine Yellow Beeswax
Composition Waxes Red Oil Hydrotreated
Stearic Acid

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DURABLE
UNIFORM
COLORFUL

Manufacturers of
COLLAPSIBLE
TUBES since
1898

TURNER WHITE METAL CO., Inc., New Brunswick, N. J.

The American Perfumer

PRICES IN THE NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

ESSENTIAL OILS

Almond Bit, per lb.	4.00@	4.75
S. P. A.	4.75@	5.10
Sweet True	2.00@	2.25
Apricot Kernel	.42@	.45
Amber, rectified	1.35	Nom'l
Angelica Root	150.00	Nom'l
Anise, U. S. P.	3.00@	3.25
Imitation	2.00@	2.10
Aspic (spike) Span.	4.10@	5.25
Avocado	.95@	1.00
Bay	1.80@	2.50
Bergamot	20.00@	25.00
Brazilian	10.00@	
Artificial	4.00@	9.25
Birch, sweet	2.40@	4.25
Birchar, crude	2.25	Nom'l
Birchar, rectified	4.25	Nom'l
Bois de Rose	4.65@	5.00
Cade, U. S. P.	1.20@	1.35
Cajuput	2.30@	3.00
Calamus	20.00	Nom'l
Camphor, "white," dom.	.30@	.35
Cananga, Java native	15.00@	15.75
Rectified	17.00	17.75
Caraway	16.00@	17.50
Cardamon	30.00@	35.00
Cassia, rectified, U. S. P.	11.00@	11.50
Cedar leaf	.85@	1.00
U. S. P.	1.05@	1.25
Cedar wood	.70@	.80
Celery	28.00@	30.00
Chamomile	150.00	Nom'l
Cinnamon	10.50@	32.00
Citronella, Ceylon	1.15@	1.30
Java	2.25@	3.00
Cloves, Zanzibar	1.75@	2.50
Copaiba	.80@	.85
Coriander	30.00@	35.00
Imitation	8.00@	14.00
Croton	3.00@	3.75
Cubebbs	4.75@	5.25
Cumin	8.75@	11.00
Dillseed	7.00@	7.50
Erigeron	2.15@	2.50
Eucalyptus	.95@	1.02
Fennel, sweet	3.50@	4.25
Geranium, Rose, Algerian	16.50@	17.50
Bourbon	18.00@	22.00
Turkish	5.50@	5.75
Ginger	20.00@	22.00
Guaiac (Wood)	5.25@	7.00
Hemlock	1.20@	1.35
Substitute	.55@	.60
Juniper Berries	12.00@	18.00
Juniper Wood, imitation	.75@	.80
Laurel	5.00	Nom'l
Lavandin	8.00@	8.50
Lavender, French	10.00@	12.00
Lemon, Calif.	3.25@	
Lemongrass	1.75@	2.00
Limes, distilled	7.50@	8.25
Expressed	11.50@	13.25
Linaloe	4.00@	4.25
Lavag	95.00	Nom'l
Marjoram	6.00@	7.25
Neroli, Bigarde, P.	340.00	Nom'l
Petale, extra	325.00	Nom'l
Olibanum	5.00@	5.75
Opopanax	25.00	Nom'l
Orange, bitter	5.50@	6.00
Brazilian	1.85@	2.10
Calif. exp.	2.00@	2.25
Orris Root, abs. (oz.)	100.00	Nom'l
Artificial	36.00@	40.00
Orris Root, abs. (oz.)	100.00	Nom'l
Pennyroyal, Amer.	2.65@	2.80
European	2.50@	3.00
Peppermint, natural	5.40@	5.60
Redistilled	5.75@	5.90
Petitgrain	1.90@	2.25

Pimento	4.00@	7.75
Pinus Sylvestris	4.25@	5.00
Pumillonis	4.25@	4.80
Rose, Bulgaria (oz.)	25.00@	32.00
Synthetic, lb.	45.00@	55.00
Rosemary, Spanish	1.75@	3.00
Sage	8.25@	9.00
Sage, Clary	45.00	Nom'l
Sandalwood, East India	6.00@	6.75
Sassafras, natural	2.00@	2.15
Artificial	2.00@	2.25
Snake root	10.00@	12.75
Spearmint	3.25@	3.50
Thyme, red	2.75@	4.00
White	3.25@	5.00
Valerian	30.00	Nom'l
Vetivert, Java	32.00@	35.00
Wintergreen	5.25@	8.50
Wormseed	3.00@	3.10
Ylang Ylang, Manila	38.00	Nom'l

TERPENELESS OILS

Bay	2.75@	2.80
Bergamot	49.00	Nom'l
Grapefruit	65.00@	
Lavender	20.00	Nom'l
Lemon	40.00@	45.00
Lime, ex.	140.00@	160.00
Distilled	82.00@	87.00
Orange, sweet	100.00@	155.00
Peppermint	11.50@	14.00
Petitgrain	3.85@	4.00
Spearmint	5.00@	6.00

DERIVATIVES AND CHEMICALS

Acetaldehyde 50%	1.90@	2.75
Acetophenone	1.90@	2.00
Alcohol C 8	7.50@	10.00
C 9	14.00@	18.00
C 10	7.75@	12.00
C 11	11.50@	15.00
C 12	7.20@	8.50
Aldehyde C 8	22.50@	28.00
C 9	30.00@	32.00
C 10	24.00@	25.50
C 11	22.00@	26.00
C 12	30.00@	35.00
C 14 (so called)	6.00@	7.25
C 16 (so called)	8.25@	9.00
Amyl Acetate	.50@	.75
Amyl Butyrate	.90@	1.10
Amyl Cinnamate	4.50@	5.80
Amyl Cinnamate Aldehyde	3.00@	5.50
Amyl Formate	1.00@	1.75
Amyl Phenyl Acetate	3.75@	4.00
Amyl Salicylate	1.00@	1.40
Amyl Valerate	2.00@	2.10
Anethol	3.00@	3.25
Anisic Aldehyde	3.75@	4.00
Benzophenone	1.15@	1.30
Benzyl Acetate	.75@	1.35
Benzyl Alcohol	1.70@	1.80
Benzyl Benzoate	1.10@	1.50
Benzyl Butyrate	3.25	Nom'l
Benzyl Cinnamate	6.50	Nom'l
Benzyl Formate	3.75@	4.00
Benzyl-Iso-eugenol	10.25@	11.25
Benzylidenacetone	2.25@	3.40
Borneol	1.80	Nom'l
Bornyl Acetate	2.00	Nom'l
Bromstyrol	5.00	Nom'l
Butyl Acetate	.11@	.14 1/2
Cinnamic Acid	3.75@	4.50
Cinnamic Alcohol	3.50@	6.00
Cinnamic Aldehyde	1.65@	1.75
Cinnamyl Acetate	10.40	Nom'l
Cinnamyl Butyrate	12.00@	14.00
Cinnamyl Formate	10.00@	13.00
Citral, C. P.	4.00@	4.85
Citronellol	6.50@	6.85
Citronellyl Acetate	4.00@	5.10

Coumarin	3.00@	3.50
Cuminic Aldehyde	8.00@	11.25
Diethylphthalate	.24@	.33
Dimethyl Anthranilate	4.55@	5.00
Ethyl Acetate	.25@	.50
Ethyl Anthranilate	5.75@	7.50
Ethyl Benzoate	.90@	1.15
Ethyl Butyrate	.75@	.90
Ethyl Cinnamate	3.60@	3.80
Ethyl Formate	.60@	1.00
Ethyl Propionate	.80@	1.00
Ethyl Salicylate	.90@	1.00
Ethyl Vanillin	6.05@	6.75
Eucalyptol	2.40@	2.75
Eugenol	3.00@	3.50
Geraniol, dom.	3.00@	5.25
Geranyl Acetate	3.50@	4.00
Geranyl Butyrate	4.00@	5.75
Geranyl Formate	4.25@	6.25
Heliotropin, dom.	5.50@	7.00
Hydrotopic Aldehyde	15.00@	18.00
Hydroxycitronellal	7.75@	10.00
Indol, C. P.	30.00@	35.00
Iso-borneol	1.10@	2.00
Iso-butyl Acetate	1.25@	2.00
Iso-butyl Benzoate	2.50@	2.75
Iso-butyl Salicylate	2.70@	5.00
Iso-eugenol	3.30@	4.00
Iso-safrol	3.00	Nom'l
Linalool	7.35@	8.00
Linalyl Acetate 90%	7.25@	10.00
Linalyl Anthranilate	15.00	
Linalyl Benzoate	10.50	
Linalyl Formate	9.00@	12.00
Menthol, Japan	14.50@	16.00
Chinese	14.00@	
Synthetic	13.50	
Methyl Acetophenone	1.60@	2.00
Methyl Anthranilate	2.50@	2.80
Methyl Benzoate	.70@	1.10
Methyl Cellulose, f.o.b. ship-		
ping point	.60	Nom'l
Methyl Cinnamate	3.50@	4.00
Methyl Eugenol	3.50@	6.75
Methyl Heptenone	3.25@	
Methyl Heptene Carbonate	45.00	Nom'l
Methyl Iso-eugenol	6.25@	11.50
Methyl Octine Carbonate	24.00@	30.00
Methyl Paracresol	2.50	Nom'l
Methyl Phenylacetate	3.75@	4.00
Methyl Salicylate	.35@	.38
Musk Ambrette	6.00@	9.50
Ketone	6.00@	10.50
Xylene	2.25@	3.25
Neroline (ethyl ester)	2.00@	3.15
Paracresol Acetate	2.50	Nom'l
Paracresol Methyl Ether	2.60@	3.50
Paracresol Phenyl-acetate	6.50@	8.50
Phenylacetaldehyde 50%	2.75@	3.50
100%	4.50@	5.00
Phenylacetic Acid	3.25@	3.70
Phenylethyl Acetate	3.00@	5.00
Phenylethyl Alcohol	2.50@	3.00
Phenylethyl Anthranilate	16.00@	
Phenylethyl Butyrate	6.50@	10.00
Phenylethyl Propionate	5.00@	6.50
Phenyl Formate	12.50@	18.00
Phenyl Valerianate	16.00@	17.50
Phenylpropyl Acet.	10.00	Nom'l
Santalyl Acetate	20.00@	22.50
Skatol, C. P. (oz.)	5.35@	6.00
Styralyl Acetate	2.50@	3.00
Styralyl Alcohol	9.25@	12.00
Terpineol, C. P.	.50@	.75
Terpinyl Acetate	.90@	1.00
Thymene	.45@	
Thymol	2.25@	5.25
Vanillin (clove oil)	2.60	Nom'l
(guaiacol)	2.35	Nom'l
Lignin	2.35	Nom'l

(Continued on p. 79)

B-W LANOLIN U.S.P.

EVENTUALLY—For better creams, with economy

B-W Lanolin the superior quality, puts into your cream that which gives the skin that smooth soft velvety feeling.

B-W Lanolin will never cause your cream to darken, is best by test and contains over 15% free and combined Cholesterol.

No other base used in your cream, equals the merits of B-W Lanolin.

B-W HYDROPHIL (Absorption Base) Made in U.S.A.

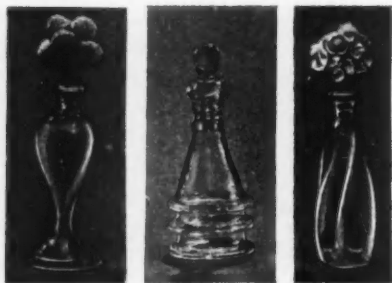
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A single item may be worth hundreds, even thousands of dollars to you or the firm you represent—especially in an emergency period such as this when many formulas need to be modified to cope with uncertain sources of supply.

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The American Perfumer & Essential Oil Review

COSMETICS • SOAPS • FLAVORS

A ROBBINS PUBLICATION

• 9 EAST 38TH ST., NEW YORK, N. Y.

(Continued from page 77)

Vetivert Acetate	25.00	Nom'l
Violet Ketone Alpha	18.00	Nom'l
Beta	15.00	Nom'l
Methyl	6.50	Nom'l
Yara Yara (methyl ester)	1.85@	2.25

BEANS

Angostura	2.50@	3.00
Tonka Beans, Surinam	.70@	.95
Vanilla Beans		
Mexican, whole	11.00@	
Mexican, cut	10.00@	
Bourbon, whole	10.00@	
South American	9.50@	10.00
Tahiti	5.75@	6.00

SUNDRIES AND DRUGS

Acetone	.08 1/2@	.09
Almond meal	.25@	.27
Ambergris, ounce	17.00@	20.00
Balsam, Copaiba	.46@	.54
Peru	1.25@	1.35
Beeswax, bleached, pure		
U. S. P.	.57@	.58
Yellow, refined	.52 1/2@	.53 1/2
Bismuth, sub-nitrate	1.20@	1.22
Borax, crystals, carlot ton	55.50@	58.00
Boric Acid, U. S. P., cwt.	6.95@	7.55
Calamine	.18@	.20
Calcium, phosphate	.08@	.08 3/4
Phosphate, tri-basic	.09@	.10
Camphor, domestic	.66 1/2@	.81 1/2
Castoreum	13.00@	26.00
Cetyl Alcohol	1.75	Nom'l
Pure	2.25	Nom'l
Chalk, precip.	.03 1/2@	.06 1/2

Cherry Laurel Water, carboy	5.75@	6.25
Citric Acid	.21	Nom'l
Civet, ounce	28.00@	49.00
Clay, Colloidal	.07@	.15
Cocoa Butter, lump	.25 1/2@	.27
Cyclohexanol (Hexalin)	.30@	.50
Fuller's Earth, ton	15.00@	33.00
Glycerine, C. P., drums	.18 1/4@	.18 3/4
Gum Arabic, white	.42@	.45
Amber	.15@	.16
Gum Benzoin, Siam	4.00@	4.25
Sumatra	.50@	
Gum Galbanum	1.80@	2.00
Gum Myrrh	.60@	.65
Henna, pwd.	.33@	.35
Kaolin	.05@	.07
Labdanum	3.25@	5.00
Lanolin, hydrous	.35@	.36
Anhydrous	.36@	.37
Magnesium, carbonate	.09@	.10 3/4
Stearate	.24@	.27
Musk, ounce	50.00@	55.00
Olibanum, tears	.25@	.30
Siftings	.09@	.13
Orange Flower Water, gal.	2.00@	2.50
Orris Root, African, pwd.	1.50@	1.55
Paraffin	.06 1/4@	.09
Peroxide	1.10@	1.75
Petrolatum, white	.06 1/4@	.08 1/2
Quince Seed	1.85@	1.90
Rice Starch	.09@	.10
Rose Leaves, red	5.45@	5.75
Rose Water, gal.	6.50@	8.00
Rosin M. per cwt.	4.12@	
Salicylic Acid	.35@	.40
Saponin	3.00@	3.25

Silicate, 40°, drums, works,		
100 pounds	.80@	1.20
Soap, neutral, white	.20@	.25
Sodium Carb.		
58% light, 100 pounds	1.35@	2.35
Hydroxide, 76% solid, 100		
pounds	2.60@	3.75
Spermaceti	.29@	.31
Stearate Zinc	.30@	.31
Styrax	1.85@	2.25
Tartaric Acid	.64	Nom'l
Tragacanth, No. 1	3.90@	4.20
Triethanolamine	.34 1/2	Nom'l
Violet Flowers	1.75@	2.00
Zinc Oxide, U. S. P. bbls.	.10 1/2@	.10 3/4

OILS AND FATS

Castor No. 1, tanks	.13@	
Cocanut, Manila Grade,		
c.i.f., tanks	.0835@	
Corn, crude, Midwest, mill,		
tanks	.12 3/4@	
Corn Oil, distilled, bbls.	.15 1/2	Nom'l
Cotton, crude, Southeast,		
tanks	.12 3/4@	
Grease, white	.08 3/4@	
Lard	.1380@	
Lard Oil, common, No. 1		
bbls.	.14 3/8@	
Palm, Niger, drums	.08 1/4@	
Peanut, refined, barrels	.17	Nom'l
Red Oil, distilled, tanks	.11@	.11 3/4
Stearic Acid		
Triple pressed	.17@	.18
Double pressed	.14@	.15
Tallow, acidless, barrels	.14 1/4@	
Tallow, N. Y. C., extra	.08 5/8@	
Whale Oil, refined	.1070@	

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OIL SPRUCE

(THE CHRISTMAS TREE)

*The odor that delights
every heart.*

*Beloved from youth
to old age.*

Why not adopt this popular odor
for a new product?

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SPARKILL, N. Y., U. S. A.



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has contributed to the advancement of better products.***

***White
Oils***

Petrolatums

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Write Dept AP-12

SHERWOOD REFINING COMPANY, Inc.

The Refinery of Controlled Specialization

ENGLEWOOD, NEW JERSEY · Refinery: WARREN, PA.

Production of Oil of Limes

(Continued from p. 34) pressure and running the oil-containing juice through high-speed centrifuges (separators). The disadvantage of this method is that the oil is diluted in a great volume of liquid which dissolves part of its important oxygenated constituents.

Both coldpressed and *écuellé* lime oils have an odor and flavor quite different from that of the distilled oil. The latter has a peculiar, fresh, "limey" note for which it has become popular in candies and especially in soft drinks, while the pressed oils are more reminiscent of the fruit peel. Distillation, as we shall see later, alters the chemical composition of the oil as it occurs in the peel, while pressed oils show a considerably higher content of aldehydes, especially citral, and esters. However, the lower yield of pressed oil necessitates higher prices and this factor has always prevented the wider use which the pressed oil, with its true-to-nature character, merits.

(To be continued)

Brand Name Policy

WHEN the War Production Board moves into high gear with its program for concentrating consumer goods industries, every attempt will be made to provide for the protection of brand names and established distribution systems will be disturbed

as little as possible, reports Arthur R. Burns, chief economic adviser of the WPB Office of Civilian Supply.

Recently returned from England where he made a study of British experience with concentration of production, Mr. Burns described the development of the plan in that country, but pointed out that many of the conditions are not applicable here. He emphasized the fact, however, that "trade relations will be upset only upon proof that such a step will assist the war program and that no similar assistance can be obtained without such a disturbance."

Family Income Rises Rapidly

Year	\$5,000 & Over	\$3,000- \$4,999	\$2,000- \$2,999	\$1,000- \$1,999	Under \$1,000
1937	4.3	8.1	19.8	39.4	28.4
1938	4.2	8.0	19.2	37.7	30.9
1939	4.0	7.7	18.6	36.5	33.2
1940	4.1	8.0	19.1	37.2	31.6
1941	4.4	8.5	20.2	39.2	27.7
1942*	5.7	12.1	23.7	36.5	22.0
1942**	7.4	15.2	26.6	32.3	18.5

(*) Jan. 1.

(**) July 1.

This chart, based on estimates made by Macfadden Publications, reflects the changes in family income wrought by America's war effort. The figures cover farm and urban groups.

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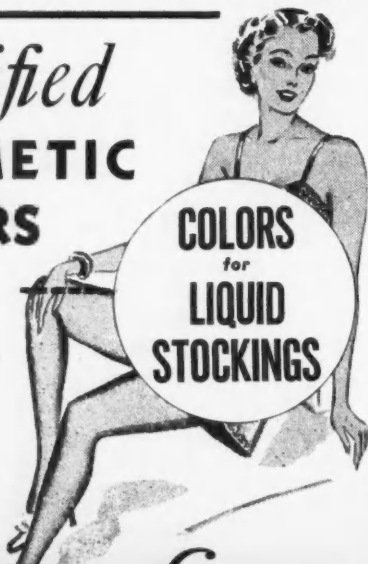
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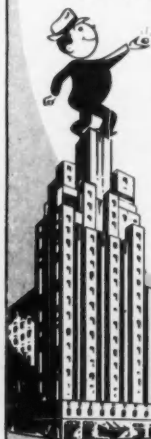
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